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## **Preface**

Dear our Guests,

It is our great pleasure to welcome all of you in Heraklion.

We are happy to co-organize it with the Hellenic Mediterranean University library celebrating the 15th Anniversary of the QQML International Conference.

As every year, the program includes a considerable number of high-quality contributions, research papers and applied works from all over the world.

Important speakers present their research and their work in the Plenary Speeches, the Workshops and the Posters which support the professional development of library scientists and information specialists and enhance the research on the Library and Information Science.

Delegates from 46 countries contributed their work: Australia, Bangladesh, Brazil, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Ghana, Greece, India, Ireland, Israel, Italy, Japan, Kazakhstan, Lithuania, Malaysia, Mexico, Nigeria, Norway, P.R. China, Pakistan, Poland, Portugal, Romania, Russia, Serbia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sultanate of Oman, Sweden, Turkey, Uganda, UK, and USA.

Finally, 93 papers, 5 Plenary talks, 3 workshops and 10 posters are concluded to be presented.

After the pandemic we are in person here, researchers, technical developers, managers and library professionals to review achievements to announce creative challenges and opportunities.

The conference also brings together members of the QQML network which illustrates the distribution of the participants in the five geographic regions of the world.

I'd like to thank the Hellenic Mediterranean University for its cooperation and hospitality as well as the Committees of the Conference which worked hard for its success.

The Conference is both social and scientific event, creates human networks and social affairs. It also offers an interesting social program.

Enjoy it!

*Anthi Katsirikou*

University of Piraeus Library

Conference co- Chair

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## ***Plenary Speeches***

### ***40 Centuries in the Labyrinth of Knowledge on Crete - From the Archive of the Minoan Palace of Knossos to the Library of HMU***

**Dr Gareth Owens**

Archaeologist, Hellenic Mediterranean University, dept of public and international affairs.

#### **Brief Cv**

Gareth Owens studied (1982-1985) Classical Philology and Ancient History in the Department of Greek and Latin at University College London in London University, where he also gained a Masters in Greek Philology and Archaeology.

Then (1986-1991) he gained an M.Phil with his Thesis “From Linear A to Linear B: A Diachronic Study of the Scripts of Late Minoan Crete” from the Department of Archaeology at University College London.

He remained there for one year (1991-1992) as Lecturer at the Institute of Classical Studies and at UCL, teaching Linear B, and he was awarded the “Ventris Award” for Mycenaean Studies.

From 1992-1994 he held a Post-Doctorate Position from the “Council of Europe” and the Hellenic State Scholarship Foundation, for “A Study of Minoan Linear A”, at the University of Crete and at the Archaeological Museum of Heraklion.

From 2001-2004 he carried out a Doctoral Dissertation with the title “A Provisional Approach to the Minoan Language”, in the Department of Linguistics at the National and Kapodistrian University of Athens.

For the next 4 years (2004-2008) he was a Post-Doctoral Research Fellow in the Department of Linguistics at Athens University, in order to study the “Cretan Hieroglyphic” Inscriptions of the First Palace Period, including the Phaistos Disk and also worked on the Daidalika website and Labyrinth Book.

He is currently working as Erasmus+ Co-ordinator of the European Union Programme at the International Relations Office of the TEI of Crete, now Hellenic Mediterranean University and is, at the same Institution, Erasmus University Teacher for An Introduction to the History of Crete, Modern Greek, Academic English and An Introduction to Philosophy Past-Present-Future for Erasmus Students at HMU.

<https://daidalika.hmu.gr/>

## ***Media and information literacy and the right of access to information***

***Nikos Panagiotou<sup>1</sup> and Anthi Baliou<sup>2</sup>***

<sup>1</sup>Associate Professor at the Department of Journalism and Media of the Aristotle University

<sup>2</sup>PhD Candidate at the Department of Journalism and Mass Media of the Aristotle University of Thessaloniki and a Senior Researcher at the Peace Journalism Lab

**Abstract.** Media and Information Literacy is about accessing news, analyzing information to determine if it's true or false, reflecting on one's own media behavior and creating media content. But it is also about acting. This is a major threat for the liberal democracies, which are based on information. Democracy is a system that is based on the information that people have, because they made their choices – their political choices – according to their own perceptions and information that they receive. If the information is toxic, democracy cannot work. If information is manipulated, people don't have a clear idea of what is going on. So, their choices are biased, and the information is a vital component of democracy. Media and information literacy should include the right to access to information as well as the quality of the information provided. MIL critical component is the protection of digital rights.

### **Bios**

**Nikos Panagiotou** is Associate Professor at the Department of Journalism and Media of the Aristotle University. He has been a Visiting Professor of Deutsche Welle Academy, Japan International University (APU) Scholar, Chevening Scholar of the Foreign and Commonwealth Office UK, fellow of Google, DAAD at Deutsche Welle, APU Universities RCAP Scholar University (Japan), Beijing Foreign Studies University, Sabanci University as well as international scholarships at the University of Luxembourg. He has important research project, with the most special one funded by Google (Digital News Initiatives). . He is in charge of Thessaloniki International Media Summer Academy, member of Task Force General Secretariat of Information and Communication for Security Journalist and Scientific Advisor of the Center for Foreign Design Policy of the Ministry of Foreign Affairs. His research interests focus on International Journalism, Media Literacy, Security Journalists, Crisis Management.

**Anthi Baliou** is a PhD Candidate in the field of “Literacy in Digital Mobile Media” at the Department of Journalism and Mass Media of the Aristotle University of Thessaloniki and a Senior Researcher at the Peace Journalism Lab. At the same time, she works as a Librarian at the Library of the University of Macedonia. She holds a Master's Degree in “Management of Cultural Units” (Hellenic Open University). She has participated in various research projects as a Research Assistant and as Project Manager (EUFactCheck, JRP, Refugees Fact-checking, DCN Global) on the field of news cross-referencing, disinformation and media literacy. Also, she teaches as an Academic Scholar at the School of Library and Information Systems, International Hellenic University. Her research interests include: Information, News and Media Literacy, Misinformation, Propaganda and Fake News, Social Influence of the Media and Social Media, Community Engagement.

## ***Misinformation and Information Behavior: Challenges for Information Professionals***

### ***Heidi Julien***

Professor in the Department of Information Science at the University at Buffalo, State University of New York (SUNY), U.S.

**Abstract.** Misinformation and disinformation are not new phenomena but are particularly concerning in the era of social media. This workshop will explore how mis- and dis-information spread, and how information behavior facilitates this spread, and challenges attempts to counter it. The potential roles of information professionals in mitigating mis- and dis-information will be explored.

#### **Bio**

**Dr. Heidi Julien** is a Professor in the Department of Information Science at the University at Buffalo, State University of New York (SUNY). Her research interests are interdisciplinary, with a focus on digital literacy and information behavior. She has been a visiting professor at the University of Malaysia, Swinburne University, the University of Pretoria, Charles Sturt University, and Beijing Normal University. She has served as editor and on the editorial board of the Canadian Journal of Information and Library Science, and on the editorial boards of Library & Information Science Research, and Cosmopolitan Civil Societies: An Interdisciplinary Journal. She currently serves on the editorial board of the Journal of the Association for Library and Information Science, Pakistan Journal of Information Management and Libraries, and the Annual Review of Information Science and Technology, as well as the editorial advisory boards of Information and Learning Sciences, and Open Information Science. Dr. Julien is a past-president of the Association for Library & Information Science Education, and a past-president of the Canadian Association of Information Science. She is also active in the Association for Information Science & Technology, where she served as chair of SIG USE.

## ***The Roots and Future of Information Literacy: Reflections from 11+ Years Working with Paul G. Zurkowski, Esq.***

### ***Jeffrey JK Kelly***

Master of Arts in Teaching, Information Literacy/Critical Thinking Master Teacher  
Founding UiLA President- Appointed by Paul G. Zurkowski, Esq. 2021  
Universal Information Literacies Association (UiLA)  
Washington, DC Metropolitan Area U.S.

**Abstract.** As we approach the 50th anniversary in 2024 of first Information Industry Association president Paul Zurkowski's 30-page founding report to the U.S. Commission on Libraries and Information Science, Washington, DC where he has been recognized as the first to publicly identify, name and define information literacy (IL), it is important to reflect on the roots, development and future of IL. Reflections are based on 11+ years learning, working and traveling with Mr. Zurkowski until his passing

in January of 2022. Reflections will also be based on studying information as a stand-alone subject sparked by an email exchange in 1999 with 2022 Nobel Prize in Physics recipient Quantum Information Physicist, Professor Anton Zeilinger. Other important IL perspectives such as by Dr. Indrajit Banerjee, former director of Media Literacy, Knowledge Societies Division at UNESCO and Dr. Daniel Boorstin, twelfth Librarian of the United States Congress will be presented. Mr. Zurkowski's "Report to the Commission" "The Information Service Environment Relationships and Priorities" that launched IL in 1974 at the dawn of the Information Age as part of the National Program for Library and Information Services designated as "Related Paper Number 5" (of 25), is even more relevant today and will be presented and explored including many of his quotes on democracy, active citizenship, and libraries in context of IL. The development and vision of the future of IL such as information optics and action literacy will also be presented. Lastly, the key events that led to starting an international professional nonprofit educational public charity association to represent IL professionals worldwide and the growing international IL community supporting an inclusive and harmonious sustainable 21st century global information society will also be presented.

### ***Understanding Librarians: Developing the Teaching Role of Chinese Librarians***

***Qianxiu Liu***

University of Tsukuba, Tsukuba, Japan

**Abstract.** With increasing roles in education that include teaching responsibilities, librarians need to learn more about pedagogical theories and techniques to provide high-quality information literacy (IL) instruction (Agyemang, 2020). Previous studies have been done in South Africa (Hart, 2006), Canada (Julien & Pecoskie, 2009; Julien & Genuis, 2011), and Israel (Aharony & Bronstein, 2014), which focus on librarians' perceptions of IL, instructional work, and their role as teachers. Unfortunately, little research has been published on how Chinese librarians view their teaching experience and skills as teachers (Gong, 2010). This study aimed to investigate Chinese librarians' perceptions of their own teaching identities, whether they feel they are teachers, what they do to prepare for teaching, and what challenges they encounter in their teaching efforts. A questionnaire was distributed electronically to a purposive sample of 135 librarians. It turns out that 70% of academic librarians have participated in any training or continuing education related to teaching work, while only 5% of public librarians have relevant training experience. The results show that the majority of participants (62.2%, n = 84) are expected to do

instruction when they began working in libraries, 13.3% (n = 33) did not have that expectation, and 24.4% (n = 33) were unsure. Compared to 63.64% of academic librarians and 60.53% of school librarians who incorporated their teaching roles as being a part of their professional identity, only 16.67% of public librarians felt that teaching was a part of their identity. This is despite half of the public librarians (58.33%) taking on a teaching role as a responsibility or an expectation. This study intended to illustrate the current state of librarians' teaching skills and the practical implications of support and training for librarians responsible for teaching.

#### **Bio**

**Qianxiu Liu** has been a researcher at Shenzhen University, China, responsible for constructing the intellectual property information literacy education system and leading the successful application of the Scientific Base of Intellectual Property Innovation and Intelligence Information Literacy Education. She also worked as a lecturer at Bunkyo University Japan. Her research interests are information literacy education, and library user research, with an emphasis on empirical and comparative studies of higher education and university libraries. Qianxiu has published more than 20 journal papers, conference papers, and a book named *Why the Library? The Role of Librarians in the Higher Education Systems of Greater China*.

Qianxiu is a member of the Japan Society for Library Information (JSLIS) and the Mita Society for Library Information (MSLIS). She was one of the winners of the outstanding award in the "Data Resource Value-Added Service Research Project" of the Digital Resource Acquisition Alliance of Chinese Academic Libraries (CALIS) in 2022. She also received the Best Presentation Award from JSLIS in 2019, a research grant from JSLIS in 2020, and an overseas training grant from the University of Tsukuba in 2016.

Qianxiu Liu received her BA from Fuzhou University, China. In addition, she possesses a Master's degree and working toward her Ph. D. thesis in Library and Information Science from the University of Tsukuba, Japan.

## ***Special Sessions***

### ***Session Title***

#### ***Empowering Citizen Services with Map/GIS Libraries***

#### **Organizers**

***Ifigenia Vardakosta<sup>1</sup> and Marcy Bidney<sup>2</sup>***

<sup>1</sup>Harokopio University of Athens, Library & Information Centre, Head Librarian, MAGIC Group Member, Greek Geographical Academic Libraries Group Member

<sup>2</sup>American Geographical Society Library. Library Associate Director for Distinctive Collections & Curator, MAGIC Group President

#### **Scope and rationale**

Geographical information is critical in humans' everyday life as it impacts in economy, politics, environment, land use, medicine, and a range of more activities. In recent years, there has been an increasing trend towards the integration of Maps and Geographic Information Systems (GIS) in citizen services. Map/GIS Libraries have been developed mainly in western world after the World War II due to the rapid advances in technology and infrastructures. The use of Map/GIS Libraries' collections and services provides a range of benefits such as improving the accessibility to information, enhancing the user experience and enabling better decision making.

The target of this Special Session is to explore the ways in which Map/GIS Libraries are being used to improve citizens' access to the wide range of information, print and electronic. It will cover various types of Map/GIS services available, including their capabilities.

Overall, this session aims to provide valuable insights into the role of Map/GIS libraries and their potential to transform the way we interact with the geographical information and the multiple geo-platforms. Attendees will have the chance to have a deeper understanding of the challenges and opportunities that Map/GIS libraries are offering and how to integrate them into their own library environment.

The organizers are willing to give their own presentation and to select up to 3-4 more speakers (depending on duration allowed for the session).

#### **Papers:**

1. Map/GIS Libraries' collections and services in Greece: challenges and opportunities by Ifigenia Vardakosta, PhD
2. E-Routes Project by Jelena Glisovic
3. From 'Hidden' to Open Data Services: Enhancing Access to Legacy Data Collections in the AGSL by Marcy Bidney
4. Unearthing the cartographic treasures of National Technical University of Athens (NTUA) by Anastasia Giamali, Stavroula Kouri

5. The Re-immergence of Cartographic and GIS Services at the University of Pittsburgh Library, 2017-2022 by Boris Michev

### ***Session Title***

***Linking research and practice: the synergies and their relevance to practice, policy and academia***

### ***Coordinator***

Maria G. N. Musoke, Professor of Information Science and Deputy Vice Chancellor, Kyambogo University, Kampala, Uganda, East Africa

**Contact:** maria.gnmusoke@yahoo.com , [dvcaa@kyu.ac.ug](mailto:dvcaa@kyu.ac.ug)

### ***Scope and rationale***

The 2023 QQML conference sub-theme (b) ‘The impact of libraries’ and sub-theme (e) ‘Future libraries’ are particularly relevant to the session title. In an era of partnerships and collaboration, rapid advances in information technology, paradigm shifts in research, learning and teaching, the growing research output that is increasingly becoming open access and the demands from library users/patrons, there is need to build on the synergies to impact academic and research libraries’ service delivery. Practicing librarians who conduct research or LIS academics and researchers who do research related to the practice of academic librarianship are invited to contribute papers to this session. The papers should share research findings about innovative practices and experiences that have been impactful – what works and what does not - to enable the participants to learn from the best practices or avoid what does not work. The application of research findings to library service delivery, policy and in theories relevant to academics and the growth of knowledge management in general will enrich the session as well as highlighting the future of libraries, archives and museums.

## **Workshops**

### **Workshop 1**

#### ***The Library as Promoter of Democracy: Composite Index Approach***

##### **Coordinators**

***Markku Antero Laitinen***

Senior Advisor, Consultant

***Svetlana Kirichenko***

University of Helsinki

***Jouni Henrik Juntumaa***

City of Helsinki, Culture and Leisure Sector

##### **Scope and Rationale**

For the evaluation of library activities and development of operations, compiling a sum index consisting of focal indicators belonging to the same group, a holistic picture of the issue being monitored can be formed. The composite index may be used as a tool of manager of the library in decision-making.

##### **Abstract**

In this workshop, the attendants discuss and rate the relative weight values of the focal attributes comprising the composite index. The aim is to apply the composite index tool for assessing how the library succeeded in contribution to the Library Act goals as related to the role of the library in promoting democracy.

##### **Participants**

**Directors and developers of public libraries.**

##### **Schedule**

Duration	Topic / Activity
30 min.	Welcome and introduction
30 min.	Discussion about the weight values
30 min.	Small groups: Scoring the variables
20 min.	Summarizing conversation
10 min.	Closing discussion and ending the workshop



## Workshop 2

### ***Black, Indigenous, and People of Color Faculty Perceptions of Open Access in the Social Sciences and Humanities***

#### **Coordinators**

***Camille Thomas<sup>1</sup> and Tatiana Bryant<sup>2</sup>***

<sup>1</sup>Scholarly Communication Librarian, Florida State University, Florida, U.S.

<sup>2</sup>Director of Teaching, Learning, and Research Services, Barnard College, U.S.

#### **Scope and Rationale**

In this session we will present the qualitative methods and analysis process used in the study, including intentional approaches to collecting demographic data for BIPOC subjects. This included asking participants to self-identify race, ethnicity, gender, nationality, and how their race or ethnicity is perceived in order to gain a deeper perspective on how identity impacts tenure, promotion, and open knowledge production. We will also present results of the study that include perceptions of whether open access publishing contributes to or challenges racial, geographic, and language biases in the global south and academic publishing broadly. We will open a discussion with session attendees to further discuss audiences experiences with knowledge inequities.

**Abstract.** In 2020, our research team (Thomas and Bryant) conducted a qualitative study on Black, Indigenous, and People of Color Faculty Perceptions of Open Access in the Social Sciences and Humanities (which will be published in the forthcoming 2023 College and Research Libraries special issue on Open Access). We interviewed an international pool of 38 faculty who identify as Black, Indigenous, and People of Color, a population which is historically underrepresented in academia. The focus groups were semi-structured with a controlled set of questions, and some follow up questions as participants elaborated on their experiences and knowledge of open access. Racial and ethnic identities were collected as well as gender, professional status, and institution size. The investigators used a grounded theory method to analyze results, coding themes emerging from perceptions and lived experiences. Participants highlighted their perceptions of the culture (or lack thereof) of open access at institutions. However, participants did identify informal messaging and experiences with the publishing process which illustrated inequities in the scholarly communication landscape. Outcomes of the study will benefit libraries by encouraging empathy, critical examinations of open access, and informing outreach to BIPOC faculty and models for scholarly communication services.

**Keywords:** Black, Indigenous, People of color, Open access, Humanities, Social science, Academic publishing.

## Workshop 3

### *Libraries Create Smart Spaces*

#### **Coodinators**

***Martha Kyrillidou and Bill Wilson***

QualityMetrics LLC, LN United

#### **Scope and Rationale**

QualityMetrics has designed a learning experience to help libraries plan about their facilities. QualityMetrics helped design the renovation plan for the Noel Wien Public Library and for the Student Success Center at the Rasmuson Library in Fairbanks, Alaska. They are engaged in visioning the future of libraries with projects from California to Massachusetts. We are passionate about the impact renovated library spaces can have on their community, offering spaces for social solidarity and safe distancing.

#### **Learning Outcomes:**

Understand how your service strategy is linked to your physical infrastructure and how your physical infrastructure is enabling you to deliver excellence in services.

Learn about basic architectural stages and design thinking approaches to communicate effectively with planners and architects.

Identify and describe the space needs for your community over a 10 to 20 year period; explore new activities and services.

Develop a vision for the different types of spaces you can offer to your community and the community outcomes that can be achieved through them.

#### **Bios**

**Martha Kyrillidou** has been involved in a number of studies on sponsored research as well as in library facilities renovations and new building projects in collaboration with architectural firms.

**Bill Wilson** has led numerous library space consultations over his 30 plus years as a library consultant.

## *Papers*

### *1:1 Computing: Leveraging the Expertise of School Librarians for whole School Change*

**Mary H. Moen**

Harrington School of Communications, Library and Information Studies, University of Rhode Island

**Abstract.** A large majority of school districts in the United States provide computer devices to every student. To date, no study has looked at the role of school librarians in the planning, implementation, or impact of 1:1 computing programs. School librarians are trained experts in locating and evaluating sources, building collaborative relationships, facilitating technology enabled learning, and delivering digital citizenship instruction. These areas are relevant to 1:1 device programs, yet school librarians are often overlooked and underused in district technology initiatives. This case study research fills a gap in the research by examining how a large suburban school district leveraged the expertise of school librarians as essential partners in their 1:1 computing initiative. Using the constant comparative method, data was analyzed from 14 individual and group interviews of school community stakeholders. Data was organized under three categories the district had prioritized: pedagogy, environment, and resources. The findings indicate that school librarians impacted pedagogy by creating virtual research modules to increase equitable access to information literacy skills, collaboratively developing curriculum that embedded technology and digital content into student centered learning activities, and teaching technology and digital citizen skills to students. For the learning environment, the redesign of the physical library spaces to meet the changing needs of students, creating an inclusive and welcoming space, and rethinking the library as a place beyond the physical walls were prioritized. In the resources category, school librarians were partners in providing equitable access to digital content through a single sign-on system, growing their collection of quality digital resources to support the curriculum, and training teachers on the digital resources and tools available. Since many districts fall short of understanding how to systematically utilize 1:1 technology, one implication of this study is an increased awareness of the role and value school librarians can provide in the planning and implementing a 1:1 computing program. This district had a strong school library team that led much of the work, so a limitation of the study is that not all districts have a district library staff or even one

coordinator to be able to participate at such a high level. Further research on how small districts with limited school library leadership positions leverage school librarians in 1:1 computing initiatives is recommended.

**Keywords:** 1:1 computing, School librarians, Technology integration.

## ***Academic Libraries as Welcoming Co-Working Spaces for Digital Nomads***

***Angeliki Garoufali<sup>1</sup> and Elisavet Chantavaridou<sup>2</sup>***

<sup>1</sup>University of Macedonia, Macedonia, Greece

<sup>2</sup>University of West Attica, Greece

**Abstract.** Thanks to technological progress, remote working has become a new trend in the international labour market in recent years. In addition, the conditions that the COVID-19 pandemic created in the labour market have made remote working more widespread than ever before. Digital nomads, an inevitable evolution of the remote work culture have recently made their appearance. As a result, a new type of collaborative workplace has emerged globally, as a cradle for independent workers, freelancers, and start-ups. Spaces such as cafés and co-working spaces are well-known options. In an effort to meet the changing needs of citizens, libraries are being transformed into open community spaces and creative hubs. The "Commons" approach of libraries as open and trusted community spaces for collaboration, connection, creation and innovation and as technology hubs that can foster entrepreneurship has gained significant traction worldwide. The aim of this paper is to propose good practices on the role of Greek academic libraries as co-working spaces and places to support entrepreneurship in light of the United Nations Sustainable Development Goals and the latest challenges that public universities face. The paper will introduce the latest Greek legislation regarding digital nomads and will suggest ways of welcoming them to Greek academic libraries in terms of physical and digital environment. After a brief introduction to current practices regarding co-working spaces for the academic community, the paper will address the possibility/ necessity to invite private individuals to use the facilities/ services that Greek public institutions offer. The paper will address these issues using literature review and documentation of current practices and legislation.

**Keywords:** Co-working spaces, Commons, Sustainable Development Goals, Digital nomads, Academic libraries.

## ***Academic Library Director Leadership Styles and Questions of Democratic Governance and Active Citizenship***

***Colleen S. Harris<sup>1</sup>, Angelina Artero<sup>2</sup>, Sean Himebaugh<sup>2</sup>, Adriana Maldonado<sup>2</sup>,  
and Megan Shipston<sup>2</sup>***

<sup>1</sup>California State University Channel Islands, John Spoor Broome Library  
California, U.S.

<sup>2</sup>California State University Channel Islands, Undergraduate student, California, U.S.

**Abstract.** When considering the impact of libraries on peoples' lives, it behooves us to consider how libraries impact those staff internal to the library as much as those served in the outside community. This paper focuses on a combination of public administration theory and data collected from academic library directors in public and private nonprofit institutions of higher education broadly across the U.S. via an instrument that combined the Authentic Leadership Questionnaire (ALQ), Multifactor Leadership Questionnaire (MLQ), and Academic Library Director Leadership Skills & Qualities Survey. The authors explore such questions as how library director leadership styles might be related to norms of democratic governance, whether certain leadership styles lend themselves more to facilitating and encouraging active citizenship behaviors by staff than others, what trends in academic library leadership data currently exist in an immediately post-pandemic world, and what leadership development might be most appropriate for academic library directors interested

**Keywords:** Democratic governance, Public administration, Library staff, Library employees, Leadership, Library directors, Library administration.

## ***Academic Library Services to Support Distance Learning: What are we Doing in Post-COVID Times?***

***Luiza Baptista Melo<sup>1, 2</sup>, Tatiana Sanches<sup>3, 4</sup>***

<sup>1</sup>Faculdade de Medicina Dentária, Universidade de Lisboa, Portugal

<sup>2</sup>Universidade de Évora - Centro Interdisciplinar de História, Culturas e Sociedades, Portugal

<sup>3</sup>UIDEF, Instituto de Educação, Universidade de Lisboa, Portugal

<sup>4</sup>APPsy-CI, ISPA – Instituto Universitário, Lisboa, Portugal

**Abstract.** During the pandemic surge brought about by COVID in 2020, higher education libraries promoted efforts to reach their readers in lockdown, demonstrating the adaptability of their services, products, and staff. The COVID-19 pandemic has driven social distancing around the

world, closing universities, schools, and other services, and for that reason, the implementation of remote services has proved to be an adequate solution. Currently, after these intense modifications, it is essential to know what changes have remained in the provision of resources for remote learning. Did libraries take advantage of the lessons from COVID to change and readapt themselves? This article analyses the support for remote learning that higher education libraries in Portugal continue to provide, regardless of the teaching model offered by their institutions. To this end, a survey was carried out among Portuguese higher education librarians based on the Standards for Distance Learning Library Services (ACRL, 2016). The study seeks to obtain data on the availability of services to users, the contribution to academic excellence through equity, direct human access, remote training, the distance services strategy, as well as the libraries' assessment in this context, and, finally, the online resources available. The results allow us to examine the strategic options of libraries in adapting their services to distance learning, revealing what sort of changes stood out in the recent period. An investigation like this is beneficial to understand and support the decision, not only in the selection of information resources to be purchased or allocated, but also to define comprehensive strategies that, instead of looking for a drastic transition from a face-to-face model to an online one, should be complementary and maintain hybrid forms in the relationship with the libraries' users.

**Keywords:** Higher Education Librarians, Portugal, Distance learning, Distance services, Online resources.

### ***Addressing the Gap in AI Education and Training for Librarians: The IDEA Institute on AI***

***Dania Bilal<sup>1</sup>, Soo Young Rieh<sup>2</sup> and Clara M. Chu<sup>3</sup>***

<sup>1</sup>University of Tennessee, Knoxville, TN, USA

<sup>2</sup>University of Texas at Austin, Austin, TX, USA

<sup>3</sup>University of Illinois at Urbana-Champaign, Urbana, IL, USA

#### **Abstract**

**Introduction:** Rapid technological advances, including Artificial Intelligence (AI), will likely shape the future of libraries and change user expectations. AI adoption in libraries requires educating and training librarians in designing, evaluating, and implementing AI applications. AI is a transformative technology that can improve library services and operations and enhance user information access and discovery. However, AI has challenges such as algorithmic bias, privacy, safety, ethics, and cost. Mitigating these challenges requires knowledge, skills, and an

understanding of AI and its applications. Libraries that have integrated AI and Machine Learning (ML) are using AI-powered chatbots, recommendation systems to enhance information access and discovery, voice digital assistants to answer user questions, robots for storytelling, reading bookshelves, inventorying library collections, and fetching books from shelves; and humanoid robots to interact with users and answer a variety of questions. Success in implementing these applications requires AI expertise, one of the significant challenges facing libraries (Park, 2019; Zhao, 2021). In a survey of academic librarians' perceptions of AI in the U.S. and Canada, Hervieux & Wheatley (2022) found that librarians needed more training in AI and Machine Learning and its application in libraries. The literature on AI in libraries is proliferating. However, most published articles are rhetorical, raising a question about the type of education and training librarians should possess to design, evaluate, and implement AI-powered solutions effectively. Much of the offerings in AI in library and information science programs in the U.S., for example, are not tailored to librarians' needs. Similarly, the events that professional associations have begun to offer lack depth in preparing librarians capable of leading AI projects, creating a gap in AI education and training.

In this presentation, we will provide an overview of the IDEA (Innovation, Disruption, Enquiry, Access) Institute on Artificial Intelligence (AI), "a one-week intensive, interactive, evidence-based and applications-oriented professional development program for library and information professionals funded by the Institute of Museum and Library Services (IMLS) Laura Bush 21st Century Librarian Program" (<https://idea.infosci.utk.edu/about/>). This Institute provided a blueprint for designing and offering AI education and training to librarians and information professionals in various information environments. We will share information about the Institute's program, how they ensured diversity, equity, and inclusion in recruiting participants, participants' learning experiences and outcomes, the new Special Interest Group in AI (SIG AI) of the Association for Information Science and Technology (ASIS&T) and AI workshops they have created, the online learning communities they have established, as well as and the roles ASIS&T and the American Library Association (ALA) played in supporting the Institute. We will also provide insights into the roles of librarians in the age of AI, including the impact of ChatGPT.

### **References:**

- Hervieux, S., & Wheatley, A. (2022). The Rise of AI: Implications and Applications of Artificial Intelligence in Academic Libraries (PIL #78). ACRL.
- Park, S. (2019). Integrating Artificial Intelligence in Libraries: A Review of Issues and Challenges. *Journal of Librarianship and Information Science*, 51(1), 7-17.
- Zhao, Y., & Wu, D. (2021). Challenges and strategies for libraries to use artificial intelligence. *Library Hi Tech*, 39(3), 517-529.

## ***An Examination of Online Database Coverage Based on Journal Citation Data: Implications for Collection Development in Communication***

***Lisa Romero***

Head, Communications Library and Associate Professor, University of Illinois,  
Illinois, U.S.

**Abstract.** Communication is an interdisciplinary study that relates to the human condition. As a discipline it contributes to a better understanding of the human element in the development of a successful democracy and pursuit of active citizenship. Databases are important library resources since they serve as gateways to information for many researchers. While databases can be essential in connecting researchers to relevant resources such as newspapers, journals, magazines, and books, they can be one of the most expensive library resources. In an ongoing climate of increasing prices for library resources and shrinking library budgets, it is important that librarians have data that helps them evaluate resources and ultimately determine which one(s) is(are) best suited to meet user needs. Using citation data, this study examines coverage of 4 communication and media databases to provide librarians with information to assist in the collection development process.

**Keywords:** Citation Analysis, Collection Development, Communication Resources, Online Databases.

## ***Analysis of Information Exchange in Facebook Support Groups for Cancer Patients in Romania***

***Simona Andreea Sumanu***

PhD student, University of Bucharest, Doctoral School in Communication Sciences

**Abstract.** Access to information is correlated with greater compliance with treatment and can influence the healing process of cancer patients, especially when they want to actively participate in decisions about their care. Information is vital for patients and must be provided in an acceptable and useful form.

The information needs of patients have been frequently addressed in recent years in many countries. In Romania, these issues have not been studied yet to the same extent.



We believe that online support groups are a valuable resource for cancer patients and their relatives as they can get information and advice from people who have been through similar situations.

The aim of this study was to analyze the posts but also the interaction between members on several support groups established on Facebook. We used multimodal discourse analysis which is a method of discursive analysis that looks at not just how individuals communicate, but how they interact with one another to create semiotic meaning.

Discussions on Facebook support groups include patients diagnoses, opinions about side effects of treatments, encouraging each other, but also information about doctors, clinics, types of treatments and alternative options.

With the help of these support groups, cancer patients become aware that they are not the only ones facing this disease, they feel and live the same experience of illness, they have the same fears, the same blockages about life and the future.

The results of our analysis indicate that Facebook support groups help patients and their carers to escape the feeling of isolation and give them a sense of belonging and solidarity. This restores the psychological balance so necessary in the healing process.

Communicating with people in similar situations and sharing information helps to reduce stress, depression and anxiety, but also to develop a clearer vision of the steps ahead.

**Keywords:** Information exchange, Cancer patients, Facebook support groups, Cancer treatment, Information needs, Romania.

### ***Analysis of Scientific and Technological Performance and Influence of Synchrotron Radiation Light Source Based on Beamlines: A Case Study of Advanced Photon Source***

***Li Yizhan<sup>1</sup>, Wei Ren, Dong Lu, Guo Shijie, Li Zexia\*, Zhang Juan, and Fan Xiaoxiao***

<sup>1</sup>Associate Research Professor, National Science Library, Chinese Academy of Science, Beijing, China

**Abstract.** Synchrotron radiation light source has brought about new discoveries in a wide range from basic scientific research, technical innovation to industry fields, which is offering extreme experimental means and conditions as a kind of typically large scientific user facility, like a giant microscope. Meanwhile, several major challenges, such as high technical complexity, long construction period and cost risk, request more caution of management practices. Monitoring and evaluating the scientific

and technological performance are effective solutions to optimize the operation and use of synchrotron radiation light source.

This paper assessed the scientific and technological performance and influence of Advanced Photon Source (APS) in USA as an example, especially from the perspective of 68 simultaneously beamlines/endstations, which are the key components of user facility and the frontline of scientific service. The main dataset was constructed based on the academic papers records allocated from the official website, including the output using APS and by the staffs of APS focusing on the establishment, development and upgrade of APS during 1985 to 2022. Each beamline was analyzed under the framework of “facilitymetrics”, and the quantitative performance measures included overall trend and activity level, discipline distribution, requirements in various countries, key institutions, academic impact, hot themes and main experimental approaches. Furthermore, several issues about the sustainability of large facility were discussed briefly: (1) the necessary of upgrade; (2) the challenge and alternativity from new disruptive experimental instruments and technology; (3) supporting trans-disciplines scientific research effectively; (4) international cooperation network in post-epidemic era.

**Keywords:** Advanced Photon Source, Beamlines, Performance Evaluation, Bibliometric analysis.

### ***Approaches to the Socialization of Educational Research Products: Voices of Mexican Researchers***

***Alma Beatriz Rivera-Aguilera, Alfredo Cruz Vásquez, María Concepción Herrera Solís, Brenda Contreras Hernández, Martha Castro, Luisa Acosta,  
and Joshua Haase***

Biblioteca Francisco Xavier Clavigero, Universidad Iberoamericana Ciudad de México, Mexico City

**Abstract.** Research results are communicated usually among peers, and sometimes for the general public, both kinds of research products are of interest to academic libraries. In this paper we will share advances of a study related to educational researchers' products meaning and processes based in researchers' voices. This investigation is funded by an educational research institute and was initiated in 2022. Librarians from two private universities and two public universities in Mexico participate. The methodology is qualitative with a transdisciplinary approach. Initial data have been collected from educational researchers specialized in social and environmental educational issues through semi-structured interviews. The

qualitative analysis of the transcribed texts is based on Grounded Theory. In each institution, an approach to categories was reached and contributes to the understanding of the role of the library in the socialization of research results framed in the meanings that researchers give to the communications of research results for different audiences. Aspects such as research topics, practices and methodologies, teamwork, academic trajectory, audiences, writing research products for specialized and general publica, educational context, human factor, commitment to social issues frame the role of the library during the socializations of educational research products as a result of an initial analysis. Subsequently, the qualitative models of the four universities will be merged in order to offer an integrated model that will give clues to understand the different forms of educational science and develop library strategies to support the role of the library in the socializations of science results.

**Keywords:** Education and research, Library qualitative research, User studies, Library support for researchers.

### ***Archive Library Museum (ALM) Communities: Protection and Promotion of Cultural Heritage Žiča's Poetry Festival Transfiguration***

***Ana Gvozdenović<sup>1</sup>, Dejan Aleksić<sup>2</sup>, and Mirjana Savić<sup>3</sup>***

<sup>1</sup>Magister in Philology, PHD student in Philology

<sup>2</sup>Poet, editor in chief in Public Library Stefan Prvovenčani Kraljevo

<sup>3</sup>National Museum Kraljevo

**Abstract.** For more than 30 years, Public Library and National Museum in Kraljevo, Serbia, have organized cultural manifestation Transfiguration. The idea was born in 1990's with a movement that included revitalising of Serbian medieval heritage. Only 5 km from the city center there is Žiča Monastery, built in 1206–1221, the place where the first Serbian kings were crowned. Nowadays, we are crowning poets here and the final of the great poetry festival takes place in this monastery. The festival is part of the Versopolis project from 2018. and it shows how a new tendency in cultural promotion can be united with traditional values. During the festival, the Library and Museum, with the Literary Club (civil society) organize many different activities: literary evenings, critical meetings, conferences (with eminent historians, archeologists, archivists...). We published many papers dedicated to the cultural heritage of our city and, on the other side, to contemporary Serbian poetry. In the last few years we brought to Kraljevo regional and international authors too and we prepared some programs for young and Gymnasium students. In this way, we

successfully connect tradition and modernity, cultural heritage and contemporary poetry.

## ***Assessing the Researcher Community: A Bibliometric Visualization Approach***

***Jennifer Zhao***

McGill University, Canada

**Abstract.** Ongoing assessment of user needs is the key to successful user-centred library practices. This is especially true in the context of a subject librarian where researchers rotate constantly, and research topics evolve subsequently. As such, subject librarians must regularly update their knowledge of the researcher community they serve in order to provide the best collections and services the researchers need. Moreover, many librarians face pricy new journals with tighter budgets and their time to evaluate the problem and make decisions is often limited. Thus, a reliable, insightful, and easy-to-conduct assessment method is crucial in the subject librarian's toolkit.

This presentation introduces multiple applications of the open access bibliometric visualization tool, VOSviewer, that can inform a subject librarian's practices related to research consultation, information literacy training, user outreach, and collection development. These uses include:

- 1) Learning about the research groups of a subject area, their citation impact and how they evolve over the years,
- 2) Examining the primary themes of a research topic and the most cited papers of each theme,
- 3) Investigating prolific authors of a topic or in a group and their collaboration both within the group and beyond, and
- 4) Identifying most cited sources by researchers in a specific area.

The data used in these assessments can be easily gathered using a bibliographic database, such as Web of Science and Scopus. The analyses with VOSviewer can be quickly conducted with customizable parameter settings. While bibliometric visualization analyses have been employed to study a research topic in many disciplines, the various analyses of VOSviewer have not yet been fully explored and integrated into the library world. This presentation focuses on some VOSviewer analyses in the context of a subject librarian, but they can be applied to other types of library-related analytic work./subject librarian; assessment tool; bibliometric visualization; research consultation; collection development; VOSviewer; co-citation; co-authorship; keyword co-occurrence; cited sources.

## ***Being Woman in the Time of Pandemic***

***Beba Stankovic***

Library advisor, Department for International Cooperation, National Library of Serbia, Serbia

**Abstract.** By some research, women's jobs are 1.8 times more vulnerable to the COVID crisis than men's jobs. Women make up 39 percent of global employment but account for 54 percent of overall job losses. One reason for this greater effect on women is that the virus is significantly increasing the burden of unpaid care, which is disproportionately carried by women. This, among other factors, means that women's employment is dropping faster than average, even accounting for the fact that women and men work in different sectors. There were a few research articles in Serbian media also talking about women's lives during the pandemic and in the National Library of Serbia, it's been recognized as an interesting topic for the new collection, to be recorded and preserved for future generations and in this way contribute to the empowerment of women through education and information. The idea was to invite women working in health care, food shops, media, and politics, all those who had to leave their homes and work despite the fear and anxiety. Collected stories were digitized (written down) and published online together with digitized photos. This digital collection was the starting point for a series of lectures, given by psychologists, sociologists, and journalists, with the idea to put the light on women's lives during pandemics and possible consequences and also to teach women how to behave during some future crisis. The lectures were public but also recorded and published online. Thus the National Library of Serbia has made the first steps toward systematic archiving of the Serbian web and is capable to make a web archive collection of online resources telling the stories of women's lives during the pandemic. This special web archive collection will also be published online with other project outputs. The idea is to launch the avalanche with this project and open a web portal for women's collections on different topics and to hear women's voices coming from all the corners of Serbian society. In this way, sustainability will be guaranteed.

## ***“Big data” re-energizing librarianship: impact on librarians***

***Alice A. Bamigbola, PhD***

Lecturer, Department of School Library and Media Technology, University of Ibadan, Ibadan, Nigeria

**Abstract.** Advanced technologies are undeniably development in the 4<sup>th</sup> Industrial Revolution era and in turn has led to the incessantly growing volumes of information on daily basis. “Big Data” is simply information surplus due to the volume, velocity, variety, variability and veracity of the data which must be processed to get value and better visualisation. Big Data helps libraries to understand the ever-changing users’ needs, consequently reshape and restructure its services and procedures. However, it offers several information technology challenges concerning its capturing, storage, searching, structuring, and visualization. This paper through literature review approach explores the concept of Big Data in a library environment, how to introduce Big Data, its use in providing library services, how librarians are involved in the Big Data and the required skills for librarians to work in data intensive era. The paper promises to stimulate librarians on the usefulness of Big Data in re-energizing librarianship in the fourth industrial revolution.

**Keyword:** Big Data, libraries, Librarians, 4<sup>th</sup> Industrial Revolution, Skills

## ***Black and Non-Black Library Workers’ Perceptions of Hiring, Retention, and Promotion Racial Equity Practices***

***Kristyn Caragher and Tatiana Bryant***

University of Illinois Chicago, Chicago, Illinois, U.S.

**Abstract.** Using data collected through an online survey, this study examined employees’ perceptions of their library’s racial equity efforts and workplace experiences with racial equity and racism. Black and non-Black participants perceptions are analyzed on hiring, retention, and promotion of Black, Indigenous, and people of color (BIPOC) employees. Our quantitative data reveals Black participants are more decisive about their experiences or perceptions than non-Black participants. Our qualitative data also reveals that libraries with no or few BIPOC employees, or

organizational issues, or hostile work environments lead to a variety of negative experiences for BIPOC employees.

**Workshop Proposal Description:** In our forthcoming article "Black and non-Black Library Workers' Perceptions of Hiring, Retention, and Promotion Racial Equity Practices" through the Journal of Library Administration, we will present our quantitative and qualitative research findings from our "Racial Equity in Libraries" study, which had over 700 participants from across the United States and Canada. During the question and answer session, we will invite participants to reflect on how they can apply our findings in their own country and institutional contexts. This session is of interest to all library employees but especially library managers and administrators.

### ***Censorship in Israeli Public Libraries: A Field Study***

***Moshe Yitzhaki and Simha Dejourayev***

Dept. of Information Studies, Bar-Ilan University, Ramat-Gan, Israel

#### **Abstract**

##### **Introduction**

The issue of censorship in public libraries is almost as old as the public libraries themselves and has been widely discussed in professional literature. However, no comprehensive study has been conducted in Israel and the current research was a pioneering one.

##### **Objectives of the study**

- 1 To present an accurate and updated picture of the situation in Israel regarding this issue.
2. To try to determine the factors affecting the extent of censorship applied by different libraries in the process of building their collections

##### **Methods**

The study combined a quantitative method (closed questionnaire) with a qualitative one (semi-structured interview). The quantitative section was designated to provide a comprehensive and thorough survey of the public libraries as well as their directors' education, attitudes and views. Questionnaires were e-mailed during 2016-2017 to all community public libraries carrying adult and children collections and conducting ongoing selection of books and other library items in the process of collection building. The qualitative section included 20 personal interviews with library directors and provided in-depth analysis of the specific environment in which library directors functioned. The findings presented a range of attitudes and reasoning regarding the process of material selection in the library.

##### **Findings**

Of more than 600 public libraries 190 returned usable questionnaires, namely a response rate of about 30 percent of the entire population. The majority of respondents lacked academic library training, apparently since most of the responding libraries, were located in the rural sector, where libraries are often managed less professionally in many respects. There was widespread agreement that the library should be dedicated mainly to providing leisure activities and entertainment. Additionally, almost all respondents perceived the public library as an institute committed to the principle of intellectual freedom. Less agreement was found, however, on the concept of the public library as bearing an educational, or active liberal role. Most respondents held a "modern orientation" approach to collection building and development and rejected an "avoidant approach" when selecting items for the collection. Opinions also diverged on the issue of free access to information in the library.

Respondents also differed in their approach to various types of controversial materials. The highest degree of openness was found with regard to sexual topics. The vast majority agreed that such materials were worthy of inclusion in a public library collection, with the exception of pornography to which 91% objected. Most respondents objected to include materials potentially endorsing crime, and to a lesser extent to materials on hotly debated issues in Israeli society.

Generally, respondents tended to allow restricted access to controversial books, media and websites in their libraries, but variations were found regarding certain items. Most differences between the respondents were related to their own level of religiosity or the community's degree of conservativeness. A less significant factor was the socio-economic level of the local municipality.

### ***Challenges of e-learning in the Information Studies department at Sultan Qaboos University***

***Ahmed Shehata<sup>1</sup>, Nahed Salem<sup>2</sup>, and Khalsa Abdullah Al-Barashdi<sup>3</sup>***

<sup>1,2</sup> Assistant professor, Department of Information Studies, Sultan Qaboos University, Sultanate of Oman

<sup>3</sup> Training Supervisor, Department of Information Studies, Sultan Qaboos University, Sultanate of Oman

**Abstract.** The Covid-19 pandemic has caused a shift in our daily life and how we interact with others. Countries have applied precautionary measures to reduce the pandemic's effect, avoid severe consequences of the virus and prevent paralyzing the medical system. One of the measures that the governments set is social distancing. While social distancing proved to be effective in fighting the spread of the virus, it affected social activities that require engaging with people. The educational process was



one of the severely affected activities by social distancing. Educational institutions require students and staff to interact in classrooms to deliver information to students and grantee that students can understand the course. Fortunately, the educational institutions managed to overcome this problem by utilizing elearning platforms that helped change the educational approach from the traditional style to the electronic style. However, utilizing this form of education has revealed many issues and challenges for academic staff and the students. These challenges affected the educational process and differed from discipline to other. The Information Studies department at Sultan Qaboos University was one of the pioneer departments that early adopted moodle platform in the e-learning process. The adoption of electronic learning before the COVID-19 pandemic was a partial adoption represented in uploading lectures and videos to Moodle submitting the assignments. As a result, moving from partial adoption of Moodle to entirely dependent on the platform has created many challenges that needed to be addressed to improve the quality of the learning process. The current paper explores the challenges that faced the adoption of e-learning in the department and possible solutions to these challenges. The study will adopt a mixed-methods approach in order to collect data from staff and students. An online questionnaire will be distributed among a sample of students, followed by four interviews. As for the staff, the data will be collected using semi-structured interviews with three of the staff working in the department. This study will help to understand how the e-learning process can be improved in the department and how to avoid possible issues that might emerge in similar situations.

**Keywords:** e-learning, Information Studies department, COVID-19 pandemic.

### ***The Challenges of Open Science and Open Access Publishing for Academics and Libraries: a Case Study***

***Kamil Matula<sup>1</sup>, Anna Novotná, and Robin Iglár***

<sup>1</sup>Institute of Computer Science, Faculty of Philosophy and Science in Opava, Silesian University, Opava, Czech Republic

**Abstract.** Research evaluation rules, legislation, and academic practice are increasingly focused on publishing in open access journals and sharing open data. In this paper, we focus on the results of a signal case study that focuses on a) the promotion of open science at the Silesian University in Opava, b) the experiences and attitudes of academics towards open science, and c) the opportunities and challenges for academic libraries in supporting academics and open science. Although the topic of open science has been discussed for a while, support from the research institution seems to be

insufficient. Academics appreciate not only financial support, but also information on which sources to publish to, how to avoid publishing in a predatory journal, how to work with open data, etc. The results will serve as a basis for further research activities and will also lead to recommendations for the expansion of library services.

**Keywords:** Open Science, Open Access, Academic libraries, Science Evaluation, Library services, Academic staff support.

## ***The Complexity of Academic Library Managers' Work Practices Supported by Computational Artefacts***

***Niki Chatzipanagiotou***

Senior Lecturer, Department of Informatics, Lund University, Sweden

**Abstract.** The research presents understandings of the complex, contextual, cooperative everyday work practices of academic library managers supported by computational artefacts, as well as challenges disrupting their practices and thereby computational artefacts usage. For this, a focused-ethnographic study was conducted among academic library middle managers in two academic libraries, in Sweden and Australia. The empirical data were collected through participant observations and formal and informal face-to-face interviews, as well as organizational documents review, and were analysed thematically. A conceptual framework incorporated main concepts of the computer-supported cooperative work (CSCW) approach. Placed within a managerial environment and inspired by management theories such as sensemaking and soft systems thinking, this conceptualisation served as a reference point to explicate the research findings and achieve the research aim, to advance the understanding of managers' everyday work practices using computational artefacts. The outcome of the research illustrates the complex, contextualised, multidimensional, and often diverse reality of academic library managers' everyday cooperative work, as well as emergent challenges that have implications for the use of computational artefacts and their workplace practices. The interconnectedness of articulation work, awareness and appropriation, which emerged as a research outcome, vividly illustrates the interdependent and interrelated nature of managers' everyday work. It extends the understanding of everyday cooperative work practices of academic library managers and provides rich analysis of their practical doing of managing and using of computational artefacts. Thus, this research generates contributions for the informatics field and the library domain.

**Keywords:** Work Practice, Cooperative Work, Cooperative Work Practices, Computational Artefacts, Computer-Supported Cooperative Work, Articulation Work, Awareness, Appropriation, Ethnography, Focused-Ethnography, Complexity, Libraries, Academic Library, Academic Library Managers.

***Creating Digital Library Accessibility and Usability Guidelines to Support Blind and Visually Impaired Users: Qualitative and Quantitative Methods Applied***

***Iris Xie, Shengang Wang, Hyung Seung Lee, and Tae Hee Lee***

School of Information Studies, University of Wisconsin-Milwaukee

**Abstract.** The purpose of this study is to review and reflect on the qualitative and quantitative methods applied and lessons learned while creating accessibility and usability guidelines for digital libraries (DL) to support blind and visually impaired (BVI) users. This project consists of three main studies: 1) BVI user study as the foundation for guideline creation, 2) stakeholder comparison study to assess the draft guidelines, and 3) evaluation of current DLs to enhance the guidelines. This study focuses on the following research questions: 1) What recruiting methods were used for BVI users, scholars/experts, and DL developers, and what were the associated challenges and solutions? 2) What data collection methods were employed for diverse DL stakeholders, and what were their strengths and limitations? 3) What data analysis techniques were used, and what associated lessons were learned?

Sixty-four BVI users were recruited with the help of BVI-related organizations in the United States (e.g., the National Federation of the Blind). Fifty scholars/experts and 50 DL developers were invited to join the study. Scholar participants were identified using literature searches of academic databases. Listservs were used to recruit accessibility and usability experts. An invitation flyer was sent to developers working at academic libraries across the United States; partner organizations helped spread the invitation flyer; and related listservs were used to recruit potential developers. Using appropriate organizations to recruit participants is crucial. Multiple data collection methods were used throughout the research project, each having its strengths and weaknesses. For the user study, pre- and post-questionnaires, think-aloud protocols, transaction logs, and diaries were employed. For the comparison study, an in-depth survey was administered to 150 participants representing three types of stakeholders. Participants were instructed to rate the guidelines

based on their perceived importance, clarity, relevance, and usefulness in different help-seeking situations and support the ratings with qualitative comments. Data collection for current DL evaluation was conducted using an in-depth survey and online focus groups. Developers provided quantitative assessments of a specific DL in its compliance with the guidelines and qualitative feedback about the guideline enhancement. Focus group participants discussed the guidelines they followed in developing DLs and the challenges they encountered in the process.

Both quantitative and qualitative analysis methods were used throughout the project to present a comprehensive view of the results. For the user study, open coding was used to identify help-seeking situations and associated coping tactics. For the comparison study, one-way ANOVA and a post hoc test using Tukey's honestly significant difference (HSD) method were applied to analyze the ratings and identify specific situations where different participant groups rated the guidelines significantly differently. Comments supporting the ratings were analyzed by open coding. For the evaluation study, the Kruskal-Wallis test was used to analyze the non-normally distributed data to compare the mean differences among the compliance rate of the guidelines for each situation and identify the lowest compliance guidelines. Open coding was used to analyze guideline violations, guidelines used by DL developers in practice, and challenges DL developers encountered.

**Keywords:** Qualitative methods, Quantitative methods, Blind and visually impaired users, Digital library, Design guidelines.

### ***Data sharing: an integral part of research practice?***

***Adela Jarolimkova and Barbora Drobikova***

Charles University, Faculty of Arts, Institute of Information Studies and Librarianship

**Abstract.** Sharing research data is now recognised as an integral part of scientific work and as a service to the public, contributing to the development of knowledge and the transparency of research. However, as many studies have shown, data sharing policies and practices vary widely across disciplines, countries and funding bodies, and ultimately depend on the motivation and attitudes of individual researchers. We focus on researchers' attitudes to data sharing, drawing on the results of data literacy and data sharing studies conducted at our university in recent years, as well as an extensive literature review of data sharing studies. We describe the factors that influence researchers' data sharing at an individual level, and the motivations and barriers that prevent effective access to data.

**References:**

- Borgman, C. L. (2012). The conundrum of sharing research data. *Journal of the American Society for Information Science and Technology*, 63(6), 1059-1078. <https://doi.org/10.1002/asi.22634>
- Shah, N., Coathup, V., Teare, H., Forgie, I., Giordano, G. N., Hansen, T. H., Groeneveld, L., Hudson, M., Pearson, E., Ruetten, H., & Kaye, J. (2019). Motivations for data sharing—views of research participants from four European countries: A DIRECT study. *European Journal of Human Genetics*, 27(5), 721-729. <https://doi.org/10.1038/s41431-019-0344-2>
- Tenopir, C., Rice, N. M., Allard, S., Baird, L., Borycz, J., Christian, L., Grant, B., Olendorf, R., Sandusky, R. J., & Lozano, S. (2020). Data sharing, management, use, and reuse: Practices and perceptions of scientists worldwide. *PLOS ONE*, 15(3). <https://doi.org/10.1371/journal.pone.0229003>
- Zenk-Möltgen, W., Akdeniz, E., Katsanidou, A., Naßhoven, V., & Balaban, E. (2018). Factors influencing the data sharing behavior of researchers in sociology and political science. *Journal of Documentation*, 74(5), 1053-1073. <https://doi.org/10.1108/JD-09-2017-0126>

## ***Developing a Model for Accessibility of Medical Information by Identifying Barriers Encountered by Medical Officers in Primary Medical Care Units (PMcus) in Western Province in Sri Lanka***

***MPP Dilhani<sup>1</sup> and Chandima Wadasinghe<sup>2</sup>***

<sup>1</sup>Senior Assistant Librarian, Postgraduate Institute of Medicine, University of Colombo

<sup>2</sup>Senior Assistant Librarian, Postgraduate Institute of Medicine, University of Colombo

**Abstract.** Globally, ICTs (information and communication technologies) have been used to promote social and economic development. The importance of information technology (ICT) services based on mobile technology is growing as information becomes crucial to illuminating development activities. The study carried out by Dilhani & Chandima (2022) the study revealed that providing "successful" accessibility for medical information by minimising barriers would entail using a variety of information sources (digital, conventional, and interpersonal) and removing potential obstacles (environmental, informational, and digital literacy) that could stand in the way of the accessing MI process. The most common barriers faced by respondents when accessing information resources were time constraints and issues with inadequate electronic search abilities or online resources. In order to access and improve the medical knowledge of the medical officers connected to Primary Medical Care Units (PMcus) in Sri Lanka, the goal of this project was to suggest strategies for the enhancement of the utilization of health information resources by MOs in PMcus in the Western Province (WP) of Sri Lanka. Suggestions derived from the study made it clear that there has to be a significant change made in the way the system for making medical information accessible in PMcus in Sri Lanka is built and improved. Moreover, the model suggested by the study can be implemented to meet the accessibility of the medical information MOs in PMcus.

**Keywords:** Medical Information, Medical Information Barriers, PMcus, Sri Lanka.

## ***Digital Humanities and Bibliographic and Documentary Heritage: Reflections and Notes***

***Fabiano Cataldo de Azevedo<sup>1</sup>, Luciana Maria Napoleone<sup>2</sup>, Maria Lucia Beffa<sup>3</sup>, and Rosaelena Scarpeline<sup>4</sup>***

<sup>1</sup>Adjunct Professor, Institute of Information Science, Federal University of Bahia, Salvador, Brazil

<sup>2</sup>Librarian, Federal Regional Court of the 3rd Region, São Paulo, Brazil

<sup>3</sup>Chief Librarian, Law School Library, University of São Paulo, São Paulo, SP, Brazil

<sup>4</sup>PhD in History, University of Campinas, Campinas, Brazil

**Abstract.** Bibliographic and documentary heritage is a topic of growing presence and interest in the discussions of memory professionals and institutions. Closely related to the Digital Humanities, the possibility of works by libraries and librarians is a mandatory field of research and applications for the dissemination and appreciation of collections. Both are umbrella concepts, as they encompass a set of transdisciplinary studies and techniques that require the collaboration of professionals and researchers from various fields and expertises. As methodology, an exploratory study of qualitative approach was adopted, based on bibliographic research and theoretical-practical reflections by members of the research group, with the aim of outlining the concepts, approaches and techniques used by the two areas and their interrelationship. Because of its polyhedral character, bibliographic heritage requires the perception of various levels of memory in the collection items, segments, collections, or in the library; the study of material bibliography, provenance marks, and indiciary paradigm; the identification and description of intrinsic and extrinsic characteristics of books, printed and manuscript documents, and in their institutional and historical contextualization, highlighting the characteristics that will compose their cultural value; the consideration of the institutional, local, technical and social memory and the organization of knowledge; and in the interaction between the levels of memory and the other supports and manifestations of heritage in the institution; the permanence and the erasure and forgetting. The treatment access and manipulation of nato-digital books and documents represent a separate challenge due to the singularity of their typology and differentiated preservation challenges. Digital Humanities brings the contribution of the representation and extroversion of physical collections in the digital environment allowing the dissemination and access in an expanded manner, the possibility of multiple manipulations by users and their enhancement by the greater visibility and reach. The reflection on the representation processes of physical collections in digital

environments, going beyond the mere requirements and processes of digitization, turns to the analysis of the preservation and distinction between the physical and the digital, and the possibilities of differentiated and coordinated work and approaches. It can be considered as a search for balance between the bibliosphere and the infosphere, the former being the result of a cultural and economic revolution after the invention of the press and centered on the printed book, and the latter, which started in 2000, with the explosion of information and communication technologies, when the storage of content is projected outside the body of the book. These efforts of dialogue and approximation of concepts and techniques of bibliographic and documentary heritage and the digital humanities are a fundamental movement and action to highlight essential knowledge for library professionals in the most diverse memory institutions and for heritage education.

**Keywords:** Digital Humanities. Bibliographic Heritage. Documentary Heritage. Memory. Libraries.

### ***Digital Informative Education Tacking Disinformation through New Models***

***Anthi Katsirikou<sup>1</sup>, Iphigenia Georgakopoulou<sup>2</sup>, Anna Theofilatou<sup>2</sup>,  
and Eleana Pathiakaki<sup>3</sup>***

<sup>1</sup> Library, University of Piraeus, Piraeus, Greece

<sup>2</sup> National Library of Greece

<sup>3</sup> Athens school of fine arts

**Abstract.** The life cycle of information begins with an information need with a special role in libraries. Knowledge of informational sources and especially of electronic sources are recognized as vital factors at all levels of research with higher literacy needs than any other time.

At the same time, it is considered a given for every organization to have and develop its own digital presence via the Internet. Thus, through digital marketing, an organization or agency, with appropriate management, can effectively communicate with its environment and audience by utilizing digital tools and social networks, and through the balance of these and traditional communication channels.

A communication's policy can help the organization in how and what content it will publish on each social network platform, as each different medium has a different audience that uses it.

New generations of users are familiar with social media, differentiated by librarians who adapt the styles of the social media tools based on their policies.

The challenge for the two above is the creation of a common language of communication in the new online world of information, based on

International Information Education Standards. In this educational context, the participation of collaborative networks and ongoing information literacy programs based on International Standards shape cultural values and abilities in users to produce independent, directed scientific research. The phenomenon of fake news and misinformation is a risk / danger. Considering libraries as places of valid knowledge, it requires librarians strengthened in critical thinking recognizing not only the value of the content of information but also evaluating the most effective model of Informational Education based on its design process. Scholars De Paor & Heravi (2020), studied how the field of librarianship can help combat the phenomenon of fake news and disinformation. They focused on analyzing current and emerging information literacy contexts and the efforts and initiatives libraries are taking to counter the spread of fake news and educate communities on how to navigate in an age of truth and misinformation.

The IPS model of information behavior by Brand-Gruwel, Wopereis, and Walraven (2009) describes informational problem reception (IPS) in which the Internet is involved in locating information. The Big6 Skills model of information education, which is a top-down approach focusing on the general in the process of total problem solving before focusing on the details and works in a circular motion, including project definition, information search strategies, identification and information access, use, synthesis and evaluation. Each of these include the stages for the correct use of the information.

The Big Six Skills method can be a dynamic tool for the development of information literacy skills with the basic one being that of the correct use of information with basic steps being contact with information sources (hearing, sight, reading) and the correct identification of similar sources. A combination of this type can improve the digital gap as it can and does reach a diverse audience with different skills, with feedback and problem solving capabilities. (This is why the combination is proposed as a new model of communication through social media).

**Keywords:** Information literacy programs, Libraries, Disinformation, the Big6 Skills model, the IPS model of information behavior, Literacy skills.

### ***Digitisation of Cultural Heritage in Galleries, Library, Archive and Museum (GLAM) communities: Convergence Challenges in the European Context***

***Brenda Siso-Calvo<sup>1</sup> and Rosario Arquero-Avilés<sup>2</sup>***

<sup>1</sup>IDEA Lab Research Group, Department of Documentation and History of Science, University of Zaragoza, Spain



<sup>2</sup>Head of IDEA Lab Research Group, Department of Library and Information Science, Complutense University of Madrid, Spain

**Abstract.** GLAM institutions are heritage centres with common objectives and functions: on the one hand, they have to ensure the preservation of their valuable collections and, on the other hand, they have to digitise these collections in order to be widely disseminated in a digital environment and, consequently, used by researchers and society in general. In the current context of digital transformation, digitisation is considered a core topic in Library and Information Science (LIS) research and in the daily activity of the professional sector. GLAM institutions have individually digitised more or less large sets of their collections, promoted mainly by strategic actions and policies that have been developed at the international level.

The general objective of this work is to identify and analyse the areas of convergence of GLAM communities that promote and facilitate the achievement of claims related to the dissemination, access and use of cultural heritage.

The specific objectives are:

- To delimit European regulations on digitisation, dissemination of digital collections and related issues.
- To identify and to analyse the common challenges faced by GLAM institutions to promote the cultural heritage.
- To determine current trends to remain relevant institutions in the new digital context.

The review of recent regulations and scientific literature on the subject show that policies and legislation act in a double sense: in addition to fostering common initiatives among institutions, they introduce issues related to digitisation and dissemination that pose new challenges for GLAMs in terms of collection management: digital preservation, intellectual property, reuse, sustainability, accessibility and usability, as well as content aggregation, access and visualization.

In relation to trends, the results reveal that the development of digital technologies (artificial intelligence, 3D technology, cloud computing, data technologies, virtual reality) as well as data management or big data present opportunities that the GLAM community could embrace for the promotion of its cultural heritage.

Lastly, we conclude with a discussion on the disciplinary approach of the GLAM community and we propose as a new line of research for future work the need to investigate and analyse empirically how these institutions are collaborating and facing together the challenges outlined in this paper.

## *Discovering Information Hygiene*

***Michaela Dombrovská***

Silesian University in Opava, Czech Republic

**Abstract.** Information hygiene refers to the practices and behaviors that individuals use to maintain a healthy and safe digital environment. With the vast amount of information available, it is important to ensure that the information we consume and share is accurate, reliable, and secure. The concept of information hygiene isn't new. Its believed to have emerged in the late '90s, when Linda Stone introduced the concept of "continuous partial attention" to describe the state in which the human mind is constantly scanning for information in an effort not to miss anything. In small doses, it can make us more productive, but in larger doses it overstimulates and exhausts us. But there are older sources<sup>1</sup>, and the topic has been addressed by librarians in various forms since at least the 1980s, when attention began to be paid to information literacy.

In recent years, there has been an increased recognition of the prevalence of misinformation, disinformation, hoaxes, and conspiracies in society. The COVID-19 pandemic has further highlighted this issue, with an overwhelming outbreak of false and misleading information surrounding the virus. In their February 2020 Novel Coronavirus Situation Report, the World Health Organization (WHO) noted that the COVID-19 outbreak and response "has been accompanied by a massive 'infodemic'—an overabundance of information—some accurate and some not—that makes it hard for people to find trustworthy sources and reliable guidance when they need it."<sup>2</sup>

One of the key aspects of information hygiene is being able to recognize and avoid false or misleading information. This can be done by verifying the sources of information, fact-checking claims, and being aware of bias and propaganda. Another important aspect of information hygiene is protecting personal information and data. This includes being mindful of what information is shared online, using secure passwords and two-factor authentication, and avoiding suspicious links or downloads that may contain malware. Information hygiene is also connected to the idea behind "info-environmentalism"<sup>3</sup>; that if our information environment is polluted, we shouldn't abandon it—instead, we should help to clean it up.

Information hygiene is closely connected to information literacy and is also a key element of responsible citizenship. While information literacy means knowing how to handle information, information hygiene also means understanding when to take care of ourselves and take the necessary rest. Information hygiene is about being a responsible digital citizen and taking

steps to protect ourselves and others in the online world. By being aware of the risks and taking proactive measures to protect ourselves, we can create a safer and more reliable digital environment.

This paper explores approaches to information hygiene, analyzes available studies and resources (using desk research and secondary analyses), and rediscovers the importance of information hygiene in the context of the rapid growth of the digital world and the development of artificial intelligence.

<sup>1</sup>Janoš, Karel. (1978) Informační hygiena [Information Hygiene]. Československá informatika [Czechoslovak Informatics], vol. 20, no. 10, pp. 279–280.

<sup>2</sup>Novel Coronavirus (2019-nCoV): Situation Report – 13. World Health Organization, 2 Feb. 2020.

<sup>3</sup>Caulfield, Mike. (2017) Info-Environmentalism: An Introduction. EduCause Review, vol. 52, no. 6.

## ***Discovering the Features and Insights of S&T Governance Based on Public Opinion Data Mining***

***Yanpeng Wang and Xuezhao Wang***

National Science Library, Chinese Academy of Sciences, Beijing, China

### **Abstract**

**Background.** The rapid development of science and technology may have a disruptive impact on social culture, industrial structure, business model and so on. Therefore, we need a complex and diverse governance system to maximize S&T's positive effects and avoid its negative effects. However, elite decision-making has played a major role in traditional S&T governance system, the wisdom of the masses was underappreciated for reasons such as cost and effort. how can the wisdom of the masses participate in the process of S&T governance more efficiently?

**Objectives.** This study seeks to propose a set of data mining methods, aiming at discovering the features and insights of S&T governance from the wisdom of the masses, which is represented by public opinion data.

**Methods.** In the first place, the public opinion data from 5426 websites' S&T channels and 2020 self-media accounts was collected, totaling more than 20 million. Secondly, a dictionary of feature words was constructed to extract the target text from the public opinion data, the target text may contain S&T governance viewpoints from the masses. Next, the pre-training model was used to judge whether the target text contains S&T governance viewpoints, and if so, the target text will be classified into 10 predefined categories. Finally, Comprehensively using scientometrics, timing analysis and social networks to discover the features and insights of S&T governance from public opinion data.

**Results.** This study proposed a set of public opinion data mining methods, the F1 value of the classification model was 0.90. Taking AI technology as an example, this study attempted to analyze the public opinion of governing AI technology, and then discovered the features and insights of AI technology governance from the perspective of the wisdom of the masses. The results showed that, AI technology governance is gradually transitioning from promotion to regulation. In terms of promotion, public opinion focus on the development of AI industry and AI talent resource, and gradually reduce the attention to AI policy design. In terms of regulation, public opinion focus on the risk management and ethical governance, while the legal governance and public policy governance need further attention.

**Conclusions.** The public opinion data contains a large number of S&T governance viewpoints, such as governance suggestions, measures and actions. Mining the public opinion data can help us quickly discover the features and insights of S&T governance from the perspective of the wisdom of the masses, which is conducive to the effective participation of the wisdom of the masses in S&T governance. Existing achievements have been integrated into a network platform.

**Keywords:** S&T Governance, Public Opinion Data Mining, Pre-Training Model, Scientometrics.

### *Diversity as a Collective Action: A Strategy for Success*

***Essraa Nawar<sup>1</sup> and Kevin Ross<sup>2</sup>***

<sup>1</sup>Leatherby Libraries Development Librarian, Chair, Arts, Exhibits and Events Committee, Chapman University, California, U.S.

<sup>2</sup>Dean, Leatherby Libraries, Chapman University, California, U.S.

**Abstract.** The Leatherby Libraries at Chapman University values and understands the importance of diversity, and to demonstrate that value, works diligently on creating collections, programming, and services that emphasize this value in myriad ways. Library staff, librarians, and administrators are committed to seeking opportunities to diversify its services for students, faculty, and researchers in order to create a just and equitable environment conducive to teaching and learning through the provision of inclusive physical and virtual spaces where users from diverse backgrounds and experiences are welcome, safe, and valued. Our goal is to reduce obstacles to accessing diverse research resources, services, learning, and engagement through educational outreach to raise awareness of diversity related issues.

In this presentation, the authors will articulate their experiences with diversity, and some of these will include the following taken steps to implement diversity initiatives to support our university:

1) Library administration selected a librarian to represent the Leatherby Libraries on all related diversity initiatives. The diversity librarian has been charged with creating a comprehensive diversity plan that will include innovative ways of thinking about diversity and emphasize diversity of thought which has always been at the heart of academic libraries. Since the implementation of this plan, the library delivered 70 plus DEI accomplishments in collaboration with different departments, schools, and colleges.

- That included examples such as: Offrenda in honor of the day of the dead just earlier this week, Pride Month Virtual and Digital displays, Library leaders Women leadership panel, Hispanic Heritage Month Celebration, Black Lives Matter and Africana studies

- Library Guides, Sustainability Studies Lib Guide, a more accessible website and stemless searching tools, Scholarship and professional development by librarians such as certifications and publications) as well as receiving the first ever Diversity Award.

2) A librarian contributed to the completion of a Diversity, Equity, and Inclusion grant to secure funding in support of a critical primary resource: The Black Historical Newspapers collection.

3) The Africana Studies subject librarian and others have collected and curated anti-racist library resources and created library research guides (LibGuides) dedicated to current social inquiries to highlight our dedication to the acquisition of diverse resources.

4) The Frank Mt. Pleasant Library of Special Collections & Archives continues to focus on promoting archival collections that emphasize people of color.

5) The Leatherby Libraries acquired new resources that provide research on Social Justice and Legal Issues relating to the LGBTQ+ community and support other diversity related studies.

6) Leatherby Libraries Wins Award for Diversity Initiative for the Sikh Initiatives at Chapman University bring critical acclaim through the Council for Advancement & Support of Education (CASE).

7) Telling Stories: One Room at a Time The Leatherby Libraries' first virtual exhibit during the pandemic.

8) First and one of a kind Black Book Nook. The black book nook collection fosters education and community engagement with Black history, thought, literature, and culture. The Black Book Nook currently has over 250 rotating books, and the collection is still growing.

Our library staff and librarians continue to seek opportunities to diversify our resources and services for students, faculty, and researchers in order to

create an environment conducive to teaching and learning. This includes the provision of inclusive physical and virtual spaces where users from diverse backgrounds and experiences are welcome, safe, and valued.

## ***Does One Size Fit All Ages? Results of an International Survey on Academic Library Services for Non-Degree Seeking Older Adults***

***Giovanna Badia and April L. Colosimo***

McGill University Library, Montreal, Quebec, Canada

**Abstract.** Non-degree seeking older adults have been meaningful contributors to McGill University campus life since 1989. McGill Library has been steadily building up library support for these lifelong learners in recent years, with a dedicated liaison librarian and targeted programming. To inform their professional practice, the authors conducted a diary study that offered insights into the information seeking behaviours of this population.<sup>1</sup> Questions remained about how other academic libraries are responding to the presence of non-degree seeking older adults at their institutions who are studying for the sheer joy of it. For example, are they aware of affiliated lifelong learning centers or units and, if so, are they offering targeted services?

To answer these questions, the authors created a survey that asked about the provision and tailoring of different library services to non-degree seeking older adults at higher education institutions and about the impact of the COVID-19 pandemic on these services. The authors distributed the survey on library listservs and to appropriate library professionals working at institutions that are members of either the Association of Research Libraries, the Canadian Association of Research Libraries, or the Age Friendly University Network. Thirty-two individuals completed the survey in the summer of 2022 and were from multiple countries: the United States, Canada, England, Ireland, Switzerland, New Zealand, Nigeria, and Taiwan.

This presentation will provide a thematic overview of the survey's findings as well as describe the steps involved in analyzing the data collected. The results provide a snapshot of library services being offered to support the lifelong learning of older adults at colleges and universities, which is currently not covered in the literature.

### **References:**

Colosimo, A., & Badia, G. (2021). Diaries of lifelong learners: Information seeking behaviors of older adults in peer-learning study groups at an academic institution. *Library & Information Science Research* 43(3): 1-8. Available at: <https://doi.org/10.1016/j.lisr.2021.101102>.

Type of session proposed

Paper with virtual presentation

## ***Does the Promotion of Leisure Reading still exist in Academic Libraries?***

### ***A Closer Look of Reading Programs in Philippine Universities***

***Roana Marie Flores<sup>1</sup> and Vivian Soriente<sup>1</sup>***

<sup>1</sup>The Libraries, De La Salle University, Manila, Philippines

**Abstract.** This exploratory study aims to examine the status of reading programs of top Philippine universities cited in the 2023 Times Higher Education (THE) World University Rankings. Specifically, the researchers intend to uncover whether academic libraries are still providing programs to encourage reading in their respective communities or not. If they are providing such programs, what strategies did they employ and what are some lessons learned that other academic libraries could learn from them? If reading programs are not apparent, will it still be considered in the university library's future library programs? This research will be significant to library managers and programming librarians as they will be able to evaluate, recalibrate, and improve the library programs, specifically reading programs, as they navigate through the post-pandemic future. The research will remind them of the libraries' critical role in creating a nation of responsible and analytical readers. The findings of the study will also benefit the library and information science (LIS) professional associations and partner organizations related to reading advocacy– to develop evidence-based programs and find solutions to the decrease of reading program initiatives in academic libraries. The study will utilize a descriptive research design in a highly qualitative approach using (1) direct observation of the university library's websites and social media accounts, (2) virtual focus group discussion (FGD), and (3) asynchronous written online interviews (for librarians who are not comfortable with FGD). Study participants will be selected using purposive sampling and must meet the criteria set forth by the researchers– university library directors or programming librarians in Philippine universities included in the 2023 THE World University Rankings. This research is not without limitations. First, this study only centered the discussion on the reading programs of top Philippine universities without considering other types of academic libraries. Second, the group dynamics of research participants may or may not affect the information they will divulge and share in the discussion.

**Keywords:** Promotion of reading, Leisure reading, Academic libraries, University libraries.

## ***Engaging Citizens and Communities: A Public History Approach for Libraries***

***Chiara De Vecchis***

Senate Library, Rome, Italy

**Abstract.** The role of libraries as a vehicle for democracy is so often invoked that it appears to be an axiom among library professionals. Could we do more to turn this idea into reality?

Libraries commitment in engaging communities and in the continuing education of aware citizens is even increased in the last decades, also by coping with social changes and new technologies, with the opportunities and challenges they may raise.

A growing phenomenon that libraries should consider is that the Web and the social networks act as amplifiers, giving voice to self-representations of people and social groups seeking for visibility, especially within the communities whose stories have been untold, neglected by a ‘official’ history, or miscommunicated (e.g. ethnical minorities, LGBTQ+, etc.). This fosters a widespread need of history, not considered as a chronological chain of facts, but as a search of roots, perceived in deep connection with people’s lives and identities, so that the past may be ‘felt’ as operating in the present to build the future; on the other hand, if the knowledge of the past is not supported by historical method and amended from cognitive biases, this attitude may lead to misinformation or fake news, or even to intentional (ab)uses of the historical memory, transforming the search for social inclusion into the risk of new divisions.

This is the humus from which Public History is born: a not-only academic field of historical studies aiming to ‘make’ history for the public and with the public, upon reliable sources and with a scientific method, to encourage active citizenship.

All this may display an interesting area of intersection with the goals of the library action. Many libraries, indeed, already experience projects and strategies to promote historical awareness as the basis of a shared vision within their communities and as a driving force for social inclusion; nevertheless, professional literature is still scarcely aware of the perspectives of the Public History. The “natural affinity” between Public History and public libraries as specialists in audience engagement has been pointed out sometimes, but libraries – in their diverse tipologies – are much more than eligible allied in communicating with the public: being expert mediators of knowledge, hubs and managers of historical sources, facilitators of information literacy, widespread in different places and communities, libraries may enhance their action by considering the PH



approach, in cooperation with historians, as an opportunity of advocacy but also as a less usual yet effective way to reach their institutional purposes. This may be achieved also by cooperating with archives and museums as main partners in the protection and promotion of cultural heritage, which is an important part of our past: in fact, ALM communities are often involved in the activities of the associations of public historians.

A review of the fast growing literature on PH and of the outputs of the PH conferences held in recent years may be a starting point to explore a variety of activities and strategies, inspired by the PH approach, that libraries may perform to promote historical consciousness and social inclusion, therefore helping the connection between libraries and democracy become more effective.

**Keywords:** Active citizenship, Public engagement.

### ***E-Routes Project***

***Jelena Glisovic***

President of the Serbian Library Association, Serbia

**Abstract.** The Creative Europe project Time travel routes through Europe (E-ROUTES) is designed with the aim of delivering a new approach in presenting European travel routes through GLAM (Galleries, Libraries, Archives, Museums) holdings and artistic material that have mutual cultural denominations for the countries participating in the project.

The topic of cultural tourist routes is understood as a space for intercultural dialogue and the basis for both cultural and tourist thematic routes that at intertwined levels connect the geographical space and the various chronological periods. This way travel or journey, here observed as both individual and collective human experience, is presented as a way of communication that connects places and people through a common experience, which provides the basis for the shared cultural heritage and wider international perspective that crosses time, space, and borders.

E-ROUTES is addressing the growing need to present and promote scattered cultural heritage and contemporary artistic production related to travel experience in Europe both in the past and in the present time. Following the idea that modern travellers seek quality information with added value such as points of interest, natural, cultural, and historical monuments valuable for visit along the route, the conference objective is to connect international professionals in cultural, heritage, tourist, educational sectors, and academia. The project activities will cover few areas of GLAM community work: awareness and collection building, cultural exchange and translation, audience engagement, as well as, dissemination and capacity building and knowledge sharing.

More info: <https://e-routes.eu/>

**Keywords:** travel routes, Europe, storytelling, cultural heritage, cultural tourism, Creative Europe.

## ***Ethical Information Factors for Shaping Value-Sensitive Information Services of Libraries***

***Jela Steinerová***

Comenius University in Bratislava, Faculty of Arts, Department of Library and Information Science, Bratislava, Slovakia

### **Abstract**

**Introduction:** The paper is aimed at finding understanding of selected ethical challenges of human information interactions in the digital information environment. We ask the question: Which ethical factors shape the use of information and visions of innovative services in digital environment? **Methodology.** Selected related works on information ethics in digital environment have been analyzed, including models of information behavior and information literacy focused on disinformation. We identified main ethical factors of human information interactions. We applied a Delphi study based on several rounds of a survey among selected experts from the Czech Republic and Slovakia. The concept of this study was based on the following components: main ethical issues, main ethical dilemmas (including the use of intelligent technologies), and main values of information. **Analysis.** The study was composed of a pilot study (4 experts), 1st round of the study (19 experts) and 2nd round of the study (6 participants of an online discussion). We applied the discourse, content analyses and conceptual modelling in analyses. Results point to perception of main ethical problems, ethical dilemmas, and values of digital information. The common discourse included such ethical factors as social rules and regulation, value tensions between technologies and social factors, truth, utility, information literacy and education. The resulting discourse is visualized in several conceptual models. **Results.** Ethical factors of information interactions shape the socio-cognitive, socio-cultural and socio-technological discourse of experts. A final conceptual model of ethical factors of information interactions emphasized the ethical access, ethical awareness, ethical reasoning, ethical intuitions, moral imagination and emotions. Limitations of the method are mainly subjectivism of interpretations. The validity of results was achieved by two independent analyses and reviews by participants. **Conclusions.** We derived implications for models of information behavior and information literacy and proposed inclusion of the identified ethical factors into value-sensitive information services of libraries. The new concept of value-sensitive

information services applies ethical factors of social rules, truth and utility and value tension between technologies and communities. The value-sensitive design of information systems is applied. Practical implications can bring more interactive value-sensitive services, focused on truth, verification of information with the use of artificial intelligence tools, publishing ethics, academic integrity, bibliometric analyses and research creativity. We propose to increase the impact of value-sensitive library services by inclusion of identified ethical factors.

### References:

- Burnett, K. and G. Burnett, (2019). Information domains, information ethics. In Proc. of CoLIS, Information Research, 24, (4), paper colis1942. Accessed: <http://InformationR.net/ir/24-4/colis/colis1942.html>
- Capurro, R., Eldred, M. and D. Nagel, (2013). Digital whoness: identity, privacy and freedom in the cyberworld. Frankfurt: Ontos Verlag.
- Fidel, R. (2012). Human information interaction: an ecological approach to information behavior. Cambridge, MA: MIT Press.
- Floridi, L. (2013). The Ethics of Information. Oxford: Oxford University Press. ISBN 9780199641321
- Forster, M. (2013). Information literacy as a facilitator of ethical practice in the professions. Journal of Information Literacy, 7, (1), 18-29. <http://dx.doi.org/10.11645/7.1.1783>
- Friedman, B. and D.G. Hendry (2019). Value Sensitive Design. Shaping Technology with Moral Imagination. Cambridge, MIT Press 2019.
- Karlova, N.A. and Fisher, K.E. (2014). A social diffusion model of misinformation and disinformation for understanding human information behaviour Information Research, 18, (1) paper 573. Accessed <http://InformationR.net/ir/18-1/paper573.html>
- Kelly, M. a J. Bielby (eds.), 2016. Information Cultures in the Digital Age. A Festschrift in Honor of Rafael Capurro. Wiesbaden: Springer 2016. 479 s. ISBN 978-3-658-14679-5.
- Lloyd, A., 2021. The Qualitative Landscape of Information Literacy Research. Perspectives, Methods and Techniques. London: Facet 2021. 152 s.
- Ruokolainen, H. and Widén, G. (2020). Conceptualisation of misinformation in the context of asylum seekers. In Information Processing and Management, Vol.57, (3), (2020), 102-127. <https://doi.org/10.1016/j.ipm.2019.102127>
- Søe, S.O., 2018. Algorithmic Detection of misinformation and disinformation: Gricean perspectives. In Journal of Documentation, Vol. 74, No. 2, 309–332. DOI 10.1108/JD-05-2017-0075.
- Stahl, Bernd C. (2021). Artificial Intelligence for a Better Future. An Ecosystem Perspective on the Ethics of AI and Emerging Digital Technologies. London: Springer 2021.
- Tuana, N. (2007). Conceptualizing Moral Literacy. In: Journal of Educational Administration Vol.45, (4), 364-378. Accessed: <http://site.ebrary.com/lib/uniba/reader.action?docID=10196373>
- Urquhart, Ch. (2018). Principles and practice in impact assessment for academic libraries. Information and Learning Sciences, Vol. 119 No. 1/2, pp. 121-134. <https://doi.org/10.1108/ILS-06-2017-0053>
- Whitworth, A.(2020). Mapping Information Landscapes. New methods for exploring and development and teaching of information literacy. London: Facet 2020. 201 p.

**Keywords:** information ethics; a Delphi study; information behavior; information literacy; value-sensitive design, innovative library services.

## ***Examining a New Generation of Service Provision in a Developing Country: Opportunities and Challenges of Virtual Library Services in Uganda***

***Lydia Namugera, Joyce Bukirwa, and Constant Okello Obura<sup>1</sup>***

<sup>1</sup>East African School of Library and Information Science, Makerere University Uganda

### **Abstract**

**Background:** Invasive technology, changing user needs, changing institutional policies, and alternative information sources that offer similar services as the library are all affecting university libraries. The 21st-century information environment is characterized by users who seldom visit the library but partially or wholly depend on google and other information sources in the comfort of their rooms. In addition, the disastrous pandemics like the recent Covid-19 and others that may possibly restrike in the future leave Virtual Libraries and Information Services (VLIS) provision as the most viable option for libraries to depend and thrive on. With this abrupt twist of events, it is not clear how University libraries in Uganda are providing VLIS to fulfill their information provision mandate in the face of the statutory blended learning and teaching approach. The purpose of this study was to examine VLIS awareness, perceptions, utilization, satisfaction, benefits, and hindrances to utilization in selected universities in Uganda in order to inform the development of strategies for more successful VLIS provision.

**Methods:** This study followed a pragmatic research paradigm, and employed a mixed-methods research design, specifically the convergent parallel mixed-methods design. Survey and interview methods were used to collect data from two selected universities, one public and one private. A semi-structured questionnaire and interview guide were used to collect data from library users and librarians respectively. Quantitative data analysis was carried out using SPSS software program for Windows, version 21 (SPSS Inc., Chicago, Illinois, USA). Descriptive statistics were generated and expressed as frequencies and percentages for qualitative variables as well as the mean and standard deviation for continuous variables. Qualitative data was analyzed using content analysis, specifically by the summative approach.

**Results:** Findings revealed that awareness of VLIS among library users was highest with library websites (68%) and e-resources (60.2%). The rest of VLIS were below 40%, indicating general low levels of awareness. Regarding utilization, library websites followed by e-resources were the most utilized (68% and 60%) respectively while the least utilized included library chat (9%) and Selective Dissemination of Information (8%).

Reasons advanced for low utilization included lack of awareness, hindrances by passwords, and log-in requests. Major benefits of utilizing VLIS included assistance with the completion of coursework and accessing resources while off-campus. Regarding attitude towards VLIS, users perceived that VLIS can improve their learning and research, and thus, they expressed their willingness to learn more and improve their knowledge about VLIS. Examination of the needs of VLIS users revealed that possession of ICT knowledge and skills, reliable internet, orientation and training, and e-resources access were the most prevalent needs.

**Conclusion:** The level of awareness and utilization of most VLIS was generally low. Poor attitude towards VLIS among the service providers and users, insufficient infrastructure, poor internet connection, and power outages were hindrances to VLIS.

### ***From ‘Hidden’ to Open Data Services: Enhancing Access to Legacy Data Collections in the AGSL***

***Marcy Bidney***

American Geographical Society Library, Library Associate Director for Distinctive Collections & Curator

**Abstract.** The American Geographical Society Library at the University of Wisconsin Milwaukee holds a large collection of geospatial data focusing Wisconsin and the Milwaukee region. The data is used for student and faculty research on campus and occasionally for research outside of campus. In the past the means for accessing and obtaining data from our collections has been less than optimal and over the last decade we have worked to move this data, and our data services, to a more open and accessible means for access and use. The presentation will focus how we were able to achieve success through utilizing student interns, staff development and collaborations across the library and campus. This project can serve as a model for smaller collections who wish to provide better access to their geospatial data collections.

### ***The Future of Music Libraries with Historical Heritage in Italy: Research and Innovation***

***Carmela Bongiovanni***

Conservatory of music “Niccolò Paganini”, Genoa, Italy

**Abstract.** The end of COVID emergency has brought some changes in Italy's music conservatory libraries: the music libraries' staff has finally been implemented by employing library assistants with expertise in the field of music librarianship. As regards innovation, only a few

conservatories and higher music institutes with stable funding (Sassari, Milan, Reggio Emilia, to name but a few examples) have already implemented new online resources for study and artistic research, thus broadening its musical heritage, in some cases conspicuous. On the other hand, as far as conservation and digitalisation policies are concerned, a reflection is needed. While it is true that the future is built in the present, there are currently not many digitalisation projects underway or completed within the Conservatories' libraries with important ancient heritages. Of course, not all music conservatory libraries have historical funds. They suffer in Italy a certain delay in updating and aligning with the new possibilities of digital library creation. Occasional, though noteworthy funding, as in the case of the library of the Naples Conservatory, the Milan Conservatory, the Florence Conservatory and a few other conservatory libraries (for instance Brescia), resulted in high-impact and long-lasting projects as regards the digitalisation of ancient sources, and their maintenance on the web also through descriptive metadata.

While music libraries are progressing more or less rapidly depending on the choices of individual institutions, students and teachers still need training in music research, and this too will be essential to invest in the future.

### ***Gamification in the School Library: The book Chaser Game***

***Paula R.V.A. Gonçalves<sup>1</sup>, Gleice Pereira<sup>2</sup>, Morgana Andrade<sup>3</sup>, Ana Paula S.<sup>4</sup>***

<sup>1</sup>Ph.D, in Information Science at São Paulo State University - Unesp, Brazil; Information Science Postgraduate Course Professor, Librarianship Department, Federal University of Espírito Santo, Brazil

<sup>2</sup>Ph.D. in Information Science at Federal University of Minas Gerais, Brazil; Information Science Postgraduate Course Professor, Librarianship Department, Federal University of Espírito Santo, Brazil

<sup>3</sup>Ph.D. in Technology and Information Systems at the University of Minho, Portugal; Librarian at Central Library at Federal University of Espírito Santo, Brazil

<sup>4</sup>Graduate in Librarianship Department, Federal University of Espírito Santo, Brazil

#### **Abstract**

**Background:** Gamification has been presented as a tool capable of generating engagement, increasing people's motivation in several areas, and improving several services, making it easier to perform real-world tasks. **Objective:** The objective is to develop a game that increases the interest of school library users in reading. **Methodology:** This is exploratory-descriptive research with a qualitative approach. The game was developed from an iterative design methodology. **Conclusion:** In addition to presenting a prototype of the game to be used and tested in

school libraries, the research provides reflections on the importance of the school library in students' lives and how a game, as a playful tool, can encourage them to practice reading.

**Keywords:** School library. Game and reading. Reading habit. Library games Gamification.

## ***How Green is the Municipal Library “Argentina Lopes Tristão”?***

***Morgana Andrade<sup>1</sup>, Ana Maria Bichara<sup>2</sup>, Paula R.V.A. Gonçalves<sup>3</sup>, Gleise Pereira<sup>4</sup>, and Karen L. Currie<sup>5</sup>***

<sup>1</sup>Ph.D. in Technology and Information Systems at the University of Minho, Portugal; Librarian at Central Library at Federal University of Espírito Santo

<sup>2</sup>Specialist in Gender and Race Public Policy Management at Federal University of Espírito Santo, Brazil; Librarian at Municipal Library “Argentina Lopes Tristão”, Brazil

<sup>3</sup>Ph.D. in Information Science at São Paulo State University - Unesp, Brazil; Information Science Postgraduate Course Professor, Librarianship Department, Federal University of Espírito Santo, Brazil

<sup>4</sup>Ph.D. in Information Science at Federal University of Minas Gerais, Brazil; Information Science Postgraduate Course Professor, Librarianship Department, Federal University of Espírito Santo, Brazil

<sup>5</sup>Ph.D in Linguistic at Edimburg University, Scotland. Department of Foreign Language and Literature, Federal University of Espírito Santo, Brazil

### **Abstract**

**Background:** The world is facing unfavorable economic, environmental, and social situations that require action from government agencies and society in general, either to minimize their impacts or to change the way they operate. Initiatives such as the UNESCO 2030 Agenda are urging libraries to actively participate in movements such as Green and Sustainable Libraries as a way to contribute to a better and more equal world. Objective: This study aims to contextualize and describe the actions taken by the Municipal Library “Argentina Lopes Tristão”, located in the state of Espirito Santo, Brazil, regarding Green and Sustainable Libraries. Methodology: This is a descriptive study using a case study as a methodology. The checklist developed by Werner (2013) for the conception of Green Libraries was used as an analysis tool. Conclusion: The study identified the aspects of Werner’s checklist that are addressed by the Library Argentina Lopes Tristão and presented the library’s latest Project, called the “Secret Garden”, as well as regular actions taken by the library staff. It is hoped that this report will contribute to other institutions reflecting on the role they can play in this context and how certain activities can contribute to sustainability.

**Keywords:** Green Library. Public library. Sustainability.

## ***How to Make Digitization Results Accessible to all Communities: The Case of EODOPEN Project***

***Alenka Kavčič Čolić and Andreja Hari***

National and University Library, Ljubljana, Slovenia

**Abstract.** Digitization has improved access to information. But not to all communities. The current predominant delivery format is PDF which is not appropriate for all users and uses. The blind and partially sighted cannot access to PDF contents and this file format is not user friendly for mobile devices readers as well. To meet the needs of both communities, alternative file formats are needed. How to produce more suitable file formats as result of digitization is one of the topics of research under the project EODOPEN (eBooks-On-Demand-Network Opening Publications for European Netizens – [www.eodopen.eu](http://www.eodopen.eu)) (2019-2024). The main objective of EODOPEN is to digitize copyrighted works from 20th and 21st century, and make them accessible not only to all library users, but also to mobile devices readers and the blind and partially sighted. The National and University Library (NUK) is directing work package: WG 4 Delivery formats of digitized material for special needs. In 2022, the Library published the document Guidelines and recommendations for the provision of alternative and special formats based on the survey on special needs of users and technical requirements

(<https://eodopen.eu/download/D11-Guidelines-and-Recommendations.pdf>).

In 2022, a research on 15 EODOPEN partners' digitization experiences at their organizations was conducted, too. This paper brings together the results of a trial implementation of the EODOPEN partners on their digitization workflows, the file formats applied for delivery and, consequently, the quality of the OCR results according to the type of output file format used for digitization.

**Keywords:** Digitization, Accessibility, Blind and partially sighted, Mobile device users, EODOPEN project.



***“If You Can Not Measure It, You Can Not Improve It”:  
Leadership Questionnaires, Academic Library Director Data,  
and the Possibilities of Analyzing Ordinal Variables as  
Continuous***

***Angelina Artero, Sean Himebaugh, Nikita Sarmiento, Adriana  
Maldonado, Susana Fontenla Lago, Jaiden Seehoffer, Colleen S.  
Harris***

California State University Channel Islands, John Spoor Broome Library, California,  
U.S.

**Abstract.** The famous quote “If you can not measure it, you can not improve it” has been attributed to various people, including physicist Lord Kelvin and management guru Peter Drucker. In the vein of establishing proper measurement techniques, a number of scholars have addressed the difficulties of using Likert scales to measure phenomena, pointing simultaneously to a scale where ordinal marking is important but where means are of limited value in cases without classic normal distribution of the data (Sullivan & Artino, 2013), while other scholars posit that with adequate sample size ordinal data can be treated as continuous with no significant adverse mathematical implications (Robitzsch, 2020). To answer questions related to academic library director leadership, the author used an instrument combining Bass & Avolio’s Authentic Leadership Questionnaire (ALQ), Multifactor Leadership Questionnaire (MLQ), and Harris-Keith’s Academic Library Director Leadership Skills & Qualities Survey. Data was collected from the entire population of 4+ year public and private not-for-profit baccalaureate-granting institutions of higher education in the U.S. as identified by the Carnegie (2018) data. With a response rate of over 29% and a dataset with an n of more than 450 consisting largely of Likert scale data, the author took the opportunity to explore differences in statistical test results interpreting ordinally measured data as ordinal, and then as continuous. This paper reviews the discoveries, and apparent advantages and disadvantages of reconsidering how we treat ordinal data for testing purposes.

**Keywords:** Statistics, statistical analysis, data types, ordinal data, data analysis.

***Impact Evaluation of Information Literacy initiatives: Case  
study of EU Erasmus+ projects in the Western Balkans***

***Jerald Cavanagh<sup>1</sup> and Lyn Robinson<sup>2</sup>***

<sup>1</sup>Nazarbayev University, Astana, Kazakhstan

<sup>2</sup>City University of London, U.K.

**Abstract.** This paper is based on research being undertaken in City, University of London. The paper describes research conducted the topic of impact evaluation of Information Literacy initiatives in the Western Balkans and describes the empirical research which investigated the research question, “Can Contribution Analysis (a Theory Based approach to evaluation) be used to evaluate, the long-term impact of European Union Tempus and Erasmus+ projects effectively?”

The research is centred on two projects funded by the EU under the Tempus and Erasmus+ programmes which were conducted in the Western Balkans from 2011-2015 and 2015 to 2018. Both projects were focused on the theme of Library and Information Literacy development. The universities and institutions involved in these projects were from Albania, Bosnia and Herzegovina, Kosovo and Montenegro. The pilot study itself was conducted in Bosnia and Herzegovina during late 2020 and early 2021.

The principal focus of this research is to examine these EU Tempus/Erasmus+ projects and establish if Contribution Analysis, a Theory Based approach developed by John Mayne, can it be used to evaluate and measure the impact of the projects on the main participants associated with the projects implementation. Also to examine the impact on the wider university community and target groups which these projects were expected to affect.

The researcher has completed the six steps outlined by John Mayne in conducting Contribution Analysis and has assembled a Theory of Change (ToC) which helped to build the contribution evidence-based narrative of the impact of the projects post ante. The resulting contribution story is now established and appraised.

The research has availed of key documents, which were employed at the conceptual stages of Erasmus+/Tempus projects at project application phase, such as the Logical Framework Matrix. The research also utilizes other project documents that are a feature of the project during the project implementation, intermediate and final reporting phase. These include project management reports, working group reports, National ERASMUS+ Office reports, intermediate and final reports. The research has also incorporated partner contributions and data from questionnaires applied in this empirical research along with interviews from participants in order to link the outcomes, deliverables and causal links of the projects with its intended logic.

**Keywords:** Contribution Analysis (CA), Impact evaluation, Theory of Change (ToC), Project evaluation, Information Literacy (IL), Western Balkans, Libraries, Erasmus+.

## ***The Impact of a National Library in People's Lives and Communities on behalf of Protection and Promotion of Cultural Heritage - on the Example of the German National Library Leipzig/Frankfurt***

***Sandra Hamm***

German National Library

**Abstract.** Libraries are places for everyone, essential places for democracy and also national libraries, formerly mainly focussed on preservation by their legal deposit mandate, can concurrently provide the function of a third place and consequently increase the conditions for the quality of stay of their users.

On the example of the German National Library with its two sites in two cities with completely different buildings from different eras and stylistic periods, the process of change in the role as a national library and the challenges to adjust to the needs within society are described.

**Keywords:** National Library, Cultural Heritage, Quality of Stay, Third Place, Reconstruction Measures, Change of Role, Active Citizenship.

## ***The Impact of Remote Work on Academic Librarians' Professional and Personal Lives: An Ethnographic Study***

***Brian Winterman<sup>1</sup> and Andrew Asher***

<sup>1</sup>Indiana University Bloomington, Bloomington, IN, U.S.

**Absrract.** With the abrupt shift to remote work in March of 2020, academic librarians faced many professional challenges in serving their users, connecting with colleagues, supporting scholars and learners, and adapting to working in environments at home that were often less than ideal. Likewise, they experienced shifts in their personal lives that forever changed the way they view the boundaries between work and the rest of life. This study aimed to find out how librarians' work and personal lives have been affected by remote work. More specifically, the researchers wanted to find out: 1.) what work librarians were doing and from where, 2.) how often librarians were working remotely and why, 3.) advantages and disadvantages of remote work, and 4.) thoughts regarding related organizational policies. In the Spring of 2022, 15 librarians in public services roles were recruited to participate in the study. Each subject was asked to track their activities for 2 consecutive workdays, then participate in a 1-hour interview. The results capture a significant and historical shift in how librarians perform and view their work, and also how their work

and personal lives are intertwined. While some quantitative results from the activity tracking will be presented, most of this presentation will focus on the analysis of the interview transcripts.

### ***The Implementation of Web 2.0 Technologies in Academic Libraries: The Case of Public Academic Libraries in Ghana***

***Miriam Linda Akeriwe<sup>1</sup> and Thomas van der Walt<sup>2</sup>***

<sup>1</sup>(PhD) University for Development Studies, Tamale, Ghana

<sup>2</sup>(Prof) Editor of Mousaion: South African Journal of Information Studies  
Department of Information Science, University of South Africa, Pretoria, South Africa

**Abstract.** This research investigated the implementation of Web 2.0 applications in public academic libraries in Ghana. The purpose of this study was to find out how the implementation of the Web 2.0 applications could address the service delivery challenges confronting public academic libraries in Ghana. The Technology Organisation and Environmental (TOE) theoretical framework guided this study. The ethnographic research design was used, while the qualitative research approach was adopted for the study; thus, data was collected using a semi-structured interview schedule. The study population consisted all library staff of all the ten public academic libraries in Ghana. Purposive sampling was used to select only the head librarians and all heads of units and sections perceived to most likely use the Web 2.0 applications in performing their duties. The thematic content analysis was used to analyze data. The main findings showed that the uptake of Web 2.0 applications in public academic libraries in Ghana was slow, as indicated by only about 40% of the participating libraries. However, the remaining six (60%) were far advanced with plans to introduce them in their libraries. Also, the few who implemented indicated the benefits they were deriving from the technologies. The study therefore recommended that the public academic libraries in Ghana should take advantage of technology to improve their service delivery processes.

**Keywords:** Web 2.0, Academic Libraries, Ghana, Service Delivery, Technologies.

### ***The Importance of Health Literacy for Cancer Patients and their Carers***

***Simona Andreea Sumanu<sup>1</sup> and Octavia-Luciana Madge<sup>2</sup>***

<sup>1</sup>PhD candidate, University of Bucharest, Doctoral School in Communication Sciences, Romania,

<sup>2</sup>Associate Professor, PhD, University of Bucharest, Faculty of Letters, Department of Communication Sciences & Doctoral School in Communication Sciences, Romania

**Abstract.** Although contemporary treatments have increased the hope of curing the disease, the diagnosis of cancer remains for many patients the prototype of physical illness and human suffering, a life-threatening disease. Following diagnosis, cancer patients receive complex information, must learn new language containing medical terms, and must give consent for treatments. Health literacy is important for cancer patients because it helps them access and understand health information to make the best decisions about their care plan. The aim of this study is to analyse the impact of health literacy on cancer patients and their carers starting from the results obtained through a questionnaire applied on Facebook support groups for cancer patients and their relatives in Romania.

Health literacy helps patients to develop their knowledge, skills, and confidence. It correlates with greater adherence to treatment and can influence the healing process of cancer patients, especially when they want to actively participate in making decisions about their care. Cancer patients who don't fully understand what their illness entails are prone to anxiety and may be dissatisfied with their treatment.

**Keywords:** health literacy, cancer patients, health information, cancer treatment, Facebook support groups, Romania.

### ***Information Sources for Studying Racial Inequality in the Classroom, the Case of Agriculture***

***Claudine Jenda***

Agriculture Librarian and Interim Head, Auburn University Libraries, Alabama, U.S.

**Abstract.** This study seeks to highlight selected Information sources to leverage in agriculture classes to develop students' awareness of inequalities that impact marginalized populations in the United States. At a university level, some faculty are making renewed efforts to address the 17 United Nations' Sustainable Development Goals in the classroom and through research. Set in 2015, the goals and targets seek to 'end poverty and hunger everywhere; to combat inequalities within and among countries; to build peaceful, just and inclusive societies' by 2030. In this paper, we will share some strategies for integrating use of selected information in agriculture courses to facilitate students' understanding of racial inequalities. This is consistent with Goal 10 that aims to 'empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.' While discussing this goal, we expect some inter-sectional ties with other goals such as those focused on food inequalities (Goal 3),

poverty (Goal 1), gender inequality (Goal 5), and clean water and sanitation (Goal 6).

### ***Innovative Processes in the Contemporary University Library***

***Elisaveta Tsvetkova<sup>1</sup>, Elena Savova<sup>2</sup>, and Trayana Petrova<sup>3</sup>***

<sup>1, 2, 3</sup>University of Library Studies and Information Technologies, Sofia, Bulgaria

**Abstract.** The unprecedented development of information and communication technologies and the irreversible globalisation processes in the modern world induce numerous innovative changes in contemporary university libraries. In response to the new information environment library institutions' traditional role is enhanced and they become digital portals for information and knowledge which leads to many transformations in the activities and services offered.

This paper presents a conceptual model for innovative policies concerning the functioning of a contemporary university library – establishment of digital collections; provision of mobile learning and mobile digital service based on smartphones; promotion of electronic information resources such as e-books, databases, etc. The successful integration of modern information technologies into library services is the adequate answer to the needs and expectations of contemporary readers.

**Keywords:** digital libraries, electronic information resources, mobile digital libraries, mobile technologies, university library.

### ***Intellectual and Industrial Property is on Track in the Academic Environment***

***Angela Repanovici<sup>1</sup>, Gabriela Ivanus<sup>5</sup>, Manolis Koukourakis<sup>2</sup>, Joumana Boustany<sup>3</sup>, and Ane Landoy<sup>4</sup>***

<sup>1</sup>Prof. Transilvania University of Brasov, Romania

<sup>2</sup>Director, Central Library, University of Crete, Rethymno, Greece

<sup>3</sup>Professor, Université Gustave Eiffel, Institut Francilien d'Ingénierie des Services (IFIS), France

<sup>4</sup>Academic Librarian, University of Bergen Library, Bergen, Norway

<sup>5</sup>PhD Student, Transilvania University of Brasov, Romania

**Abstract.** To encourage the creation of a wide variety of intellectual goods, intellectual property law gives people and businesses property rights to the information and intellectual goods they create, usually for a limited period. This gives economic incentives for their creation as people may benefit from creating intellectual goods and information. Through the law and the accompanying rights people and businesses may protect their ideas and prevent copying. Within the European ERASMUS+: Strategic

Partnerships in Higher Education funded project Introducing Intellectual Property Education for Lifelong Learning and the Knowledge Economy IPEDU, a course with five modules, was developed for librarians and recent graduates to strengthen their knowledge in the field of intellectual and industrial property. In the case of Transilvania University, students, master's students, and doctoral students participated in qualitative research regarding the idea of having an IIP course. 262 respondents answered. There were open questions about which sentiment analysis was used. The interpretation of the results was carried out by the UTBV team and the UOCL team, partners in this project. The students wanted to participate in such a course, which was a unanimous conclusion. This questionnaire was also given to master students at Gustave Eiffel University who also participated in a course on intellectual property. A comparative study will make it possible to verify whether French students are also interested in this topic. The research team analysed and compared the findings before presenting their findings.

### ***Intellectual Property Rights Awareness among Students of Faculty of Kinesiology University of Zagreb***

***Ivan Čolakovac<sup>1</sup> and Iva Barković<sup>1</sup>***

<sup>1</sup>University of Zagreb, Faculty of Kinesiology

**Abstract.** In the era of globalization, there is a pressing need to inform college students about intellectual property rights and related law. Real production, the driving force behind every nation's progress, may be created from intellectual property. College students should cultivate their awareness of intellectual property rights because they will be the primary producers and users of intellectual property in the future. Students currently face issues such as lack of education courses, a lack of knowledge reserves, and a lack of legal thinking about intellectual property. Intellectual property is an integral part of the sports world. Sport and its linked activities are developing along with several new phenomena, difficulties, and risks, requiring strict observation and legal compliance. The rise of counterfeiting and piracy has many negative impacts on society and the world of sports. The two primary IP rights in sports historically have been copyright and trademarks. While copyright and trademarks serve as the foundation for many industries (such as broadcasting, fashion, and brand value), it is important to use other types of IP rights to safeguard content and creative work. For instance, the development of advanced technology has led to an increase in research-based, cutting-edge athletic goods. These goods consequently need robust patent protection. Every sport possesses an innovative element, but without IP, sports cannot

develop into a profitable asset. In view of these facts, the current study was conducted to determine the level of IP rights knowledge among college students of Faculty of Kinesiology University of Zagreb. The descriptive research method was used for this investigation: the study was conducted through an altered, revised questionnaire. Students of the final year of the Integrated undergraduate and graduate university study Kinesiology participated in the research. There were three sections to the questionnaire. The students' demographic data was gathered in the first section. The second half of the survey consisted of a list of questions to test students' knowledge in the various categories of intellectual property, while the final section was a list of statements to evaluate students' comprehension of copyright protection. The expected results of the survey will show that out of the most known IP rights (patents, designs, copyright, and trademarks) copyright is the most often encountered in students research and therefore the most known to participants. Finally, the outcome of this study will inform projects in the field of Intellectual and Industrial property, such as the ERASMUS + IPEDU project, which aim at forecasting the needs of the future labor market regarding Industrial Property while introducing education and proposing curricula in this field.

**Keywords:** Intellectual property, Higher education, Kinesiology, Croatia, Survey.

### ***Intrapreneurship in Philippine Academic Libraries: Shifting Practices and New Challenges***

***Marian Ramos Eclevia<sup>1</sup> and Carlos L. Eclevia Jr.<sup>2</sup>***

<sup>1</sup>Department of Educational Leadership and Management, Br. Andrew Gonzalez FSC College

of Education, De La Salle University, Manila

<sup>2</sup>Southville International School and Colleges, Philippines

**Abstract.** Higher education institutions are expected to take a more active role in a more entrepreneurial climate. Academic libraries are consequently becoming increasingly active in campus entrepreneurial ecosystems. It is not uncommon for librarians who have become innovative out of necessity to invent and initiative entrepreneurial endeavors. They constantly innovating and continuously identifying, analyzing, and capitalizing on opportunities to create a new generation of services and programs, despite the fact that academic libraries operate in an increasingly unstable environment due to rapid technological advancement and challenges from the economic, financial, and political sectors of society. Academic libraries participate in entrepreneurial initiatives for various reasons. This paper investigates how library management develops entrepreneurial activities in



terms of idea generation, opportunity recognition, opportunity development, venture launch, and impact measurement. In addition, it explores the driving factors for successfully implementing entrepreneurial initiatives and determines the challenges and solutions library administrators face in meeting the goals of entrepreneurial activities. Semi-structured interviews were conducted with the directors and chief librarians of the target libraries to collect and document their entrepreneurial activities and practices. This research will contribute to the expanding body of literature on entrepreneurial librarianship by highlighting the development of entrepreneurial initiatives in academic libraries in the Philippines. The results will also help library management and school administration understand and recognize the stimuli that can drive sustainable entrepreneurship in academic libraries. It also attempts to fill a gap in the literature on developing an entrepreneurial university library in the Philippines by offering empirical data on the issues of sustainable entrepreneurship.

**Keywords:** Entrepreneurial librarianship, Entrepreneurial librarians, Intrapreneurship, Academic libraries.

### ***Key Informant Interview Method for Needs Assessment Research***

***Melissa P. Johnston***

Professor, University of West Georgia, Carrollton, GA, U.S.

**Abstract.** This presentation will focus on utilizing the key informant interview method for conducting needs assessment research. Needs assessment research is a “systematic approach to studying the state of knowledge, ability, interest, or attitude of a defined audience or group involving a particular subject” (McCawley, 2009, p. 3). The first step in conducting a needs assessment is to determine the objectives of the study and define the target audience, or those who will provide the data. The next step in the needs assessment process is to gather appropriate and sufficient data that provides evidence that can be used to determine which of the possible means-to-the-ends are most effective and efficient for achieving the desired results. One appropriate method to employ for this type of research is key informant interview. The needs assessment process is not a linear one, it is iterative with loops, with what you learn from your observations may inform what you ask in the interview, and what you learn in the interview may lead you to see things differently in your observations (McCawley, 2009). Key informant interview is a qualitative research method in which the researcher conducts in-depth interviews with a select group of individuals who are likely to provide needed information, ideas,

and insights on the particular subject of study. In-depth interviews are conducted with a small number of key informants, usually 15-35, and focus on a topic that the interviewees have first-hand knowledge. The primary goal is to obtain qualitative description of perceptions or experiences, rather than measuring aspects of the experience (Gilchrist & Williams, 1999; Tremblay, 2003).

The first step is selecting the key informants, these are individuals who meet specific selection of criteria based on their personal experiences and knowledge of the topic under study and can provide significant contributions to the inquiry. It is important to establish a rapport with the key informants in order to obtain in-depth information about practices and perceptions. Then interviews can be conducted with these selected key informants. The interview is usually conducted using an interview guide that list topics, issues, or general questions to be covered during the interview. The interviewer frames the actual questions during the course of the interview. This semi-structured interview with a key informant should have an informal tone, like a conversation. The interviewer probes to elicit more information from the informant throughout the interview. This type of interview provides flexibility to explore new ideas and issues that are relevant to the study's purpose. It is recommended that key informant interviews are all recorded and supplemented with research notes to ensure the collection of accurate and comprehensive responses (Gilchrist & Williams, 1996; Kaplan, 2013; Tremblay, 2003). The data collected through key informant interviews can be analyzed to look for trends and patterns, which can then assist in identifying the needs. This method will be presented in detail with an example application of the method to assess needs of school library professionals in supporting STEM education efforts in their schools.

### **References:**

- Gilchrist, V. A., & Williams, R. L. (1999). Key informant interviews. In B. F. Crabtree and W. L. Miller (Eds.), *Doing qualitative research* (pp. 71-88). Sage.
- Kaplan, C. (2013). The key informant interview. *The Research Review*, 3(1).  
[http://www.ctfalliance.org/research\\_savvypractitioner.htm#select](http://www.ctfalliance.org/research_savvypractitioner.htm#select)
- McCawley, P. F. (2009). Methods for conducting educational needs assessment: Guidelines for cooperative extension system professionals. <http://www.cals.uidaho.edu/edcomm/pdf/BUL/BUL0870.pdf>
- Tremblay, M. A. (2003). The key informant technique: A non-ethnographic application. In R. G. Burgess (Ed.), *Field research: A sourcebook and field manual* (pp. 151-163). Routledge.

## ***Language Bias in Evidence Syntheses in the Environmental Sciences***

**Jessica R. Page**

Associate Professor, Head of the Science Librarians Group and the Hodesson Veterinary Medicine Library, The Ohio State University, Ohio, U.S.

### **Abstract**

**Introduction:** Although evidence syntheses aim to capture all of the literature on a topic meeting pre-defined criteria, studies are often excluded due to language, either because the search process tacitly excludes them or because authors explicitly exclude materials they cannot read. Excluding studies in languages other than English, as language-limited author teams often do, may introduce bias and affect the outcomes of an evidence synthesis. Studies of evidence syntheses in several disciplines show mixed impact of exclusion based on language, with some showing significant bias and others claiming those studies would have been excluded for other reasons.

**Objective:** This study aims to identify the effects of language exclusion on bias in evidence syntheses in the environmental sciences.

**Methods:** This study uses the Center for Environmental Evidence's (CEE) Database of Evidence Reviews (CEEDER) as the source of published evidence syntheses in environmental sciences. CEEDER includes two categories of evidence syntheses: Evidence Overviews, intended to answer exploratory questions, and Evidence Reviews, which answer explicit questions. My preliminary data use just the Evidence Overview dataset, though the full study will work with the complete CEEDER database.

The studies in the CEEDER database have been critically appraised using the CEE Synthesis Appraisal Tool (CEESAT) to evaluate the reliability of each study. Those categories assessed whether a study's inclusion criteria were clearly defined, consistently applied, and transparently reported. Studies that were poorly ranked (less than 2/4) in all three categories contained too little useful information on their criteria and were excluded. Each of the remaining articles' methods and supplemental materials were examined to determine whether explicit language criteria were provided; whether specific languages were identified for inclusion; and whether language was used as a search term or otherwise as part of a pre-screening process. The full text was also searched for "English" or "language" to ensure capture of any discussion of language.

**Results:** The preliminary results using the Evidence Overviews dataset showed that 41% of studies explicitly excluded evidence based on language, and most of those (32% of the total dataset) limited to English

only. Only 13 of the included 157 studies explicitly acknowledged language as a limitation.

59% of the studies did not mention language at all, but a review their references and lists of included studies suggests that all or most of the studies that most of these papers included are in English.

**Conclusions:** Many of the evidence syntheses reviewed limit included studies by language, particularly to those in English, without explicitly acknowledging the potential for bias this can cause. Local or global policy or practice based on these studies could be affected by their exclusion of works written in other languages that could reflect regional or local distinctions. This study and CEEDER are both limited to English.

This study may generate recommendations for publishers and authors regarding explicit exclusion/inclusion criteria around language, and acknowledgement or assessment of bias when the languages included are limited.

**Keywords:** Evidence syntheses, Language bias, Sustainability literacy, Multiculturalism.

### ***Libraries are for everyone - EBSCO's accessibility solutions***

***Dragan Nikolic***

EBSCO Information Services

**Abstract.** As accessibility regulations in libraries around the world continue to be refined, providers must ensure that their products and services comply with accessibility guidelines and best practices. EBSCO is committed to enhancing accessibility and engagement in academic community for all users, including those who are visually or otherwise impaired. We invest time and resources to ensure compliance of our products with the highest accessibility standards. Furthermore, EBSCO secures management of accessibility of content from external partners. We are continuously optimizing our user-oriented EBSCOhost platform, working on positive EDS experience and accessibility of databases and eBooks. Over the years EBSCO has been supporting libraries meeting accessibility needs of their patrons with our products and solutions, and we will continue working toward creating the most user-friendly library experience possible.

## ***Library as a Promoter of Democracy***

***Mika Mustikkamäki<sup>1</sup> and Anu Ojaranta<sup>2</sup>***

<sup>1</sup>Regional State Administrative Agency, Western and Inland Finland

<sup>2</sup>Regional State Administrative Agency, Southwestern Finland

**Abstract.** We present national survey data from Finland, concerning (public) libraries as promoters of democracy. The survey (N=1000) examined the opinions of the Finnish population on how Finnish public libraries have performed a certain part of their statutory tasks, and how important and successful the population perceives certain of these library services. The aim of the survey was to find out, in particular, the success and awareness of library services related to active citizenship, democracy and freedom of speech, i.e. the societal role of libraries. The results are presented by age group as well as the frequency of library visits before the COVID-19 pandemic. This data gives the first broader look into how Finns perceive the new tasks given to Finnish public libraries by the Public Library Act of 2017, and how they see libraries succeeding in enacting these tasks.

## ***The Library as a Space for Cultural Mediation: The School Community Portrays in the Project between Verses and Rhymes***

***Eliana Terra Barbosa<sup>1</sup>, Terra Eliana<sup>1</sup>, and Gleice Pereira<sup>2</sup>***

<sup>1</sup>Coordenadora de bibliotecas do sistema municipal de ensino de Vila Velha ES, Brasil

<sup>2</sup>Professora do Programa de Pós-graduação e do departamento de biblioteconomia da Universidade Federal do Espírito Santo, Brasil

**Abstract.** The project “Entre Versos e Rimas” promotes the democratization of the capixaba culture, it is considered that the appropriation of this culture is unavoidable for the protagonism of the subjects in the individual and collective history. The focus of the project is not only the publication of the book but the democratization of the culture present from the moment that the various subjects are represented. The objective is to evaluate the impact of the library's cultural mediation practices by the team of librarians who work in school libraries in collaboration with the school community: students, teachers, pedagogical technical staff, and parents. The methodology comprises a bibliographical study using the following researchers as a theoretical reference: Adabalde (2015); Chartier (2002); Teixeira Coelho (1997); Rasteli and Caldas (2016 and 2017); Perrotti and Peiruccini (2007). As a result of the project, a book

is published annually with a selection of the best productions according to school age. It is concluded that reading, writing, and art blend together, giving cultural meaning to “Entre Versos e Rimas”.

**Keywords:** Citizenship in the library; Democracy and library; School and community.

## ***Library Life Pulse Survey at the University of Pretoria 2022***

***Zenzile Ntshabele***

Department of Library Services, University of Pretoria, South Africa

**Abstract.** The Department of Library Services (DLS) ensures that data and information analysis is used to make effective decisions. Additionally, the library recognizes that user expectations must be quantified before they can be met, and ideally exceeded. As a result, conducting quality surveys is an essential component of the DLS performance measurement system, as it fosters a culture of excellence and the continuous enhancement of service quality. The DLS has used the LibQUAL survey tool since 2001 to measure service quality perceptions, and the results form part of the department's key performance indicators. However, given the changing academic environment and the DLS's desire to focus more on user experience, the library decided to explore a new Library Life Pulse survey, which measures impact and experience in addition to perceptions of service quality. The survey evaluated four core aspects of users' lives: employability, academic life and wellbeing, social life, and six core library metrics: overall satisfaction and perceptions, locating and using library resources, library buildings and spaces, customer services, training and skills support, and communications.

For many reasons, the Library Life Pulse survey response rate (3.1%) was lower than the previous LibQUAL surveys. The results indicated that library users were pleased with the services provided by the DLS. On a scale of 10, undergraduate students rated their library satisfaction 8.6 (7.3 in LibQUAL 2017), 8.4 for postgraduate students (7.3 in LibQUAL 2017) and 8.4 for academic staff members (7.4 in LibQUAL 2017). The results also indicated that the library impacted more academic staff members than students. In addition, academic staff members were more aware of the library's services, found it easier to locate and utilize library resources, and were more satisfied with customer service and support, library communications, and the training and skills development the library offers than students. However, students were more satisfied with library spaces than academic staff members, which is logical given that students are the primary library space users. Although feedback was generally positive, the

library must address certain areas for improvement to enhance the user experience.

### ***Limits to Trust: Library Learning Analytics from the Student Perspective***

***Andrew D. Asher,\* Kristin A. Briney, Kyle M. L. Jones, Mariana Regalado, Michael R. Perry, Abigail Goben, Maura A. Smale, and Dorothea Salo***

Indiana University

**Abstract.** As universities and academic libraries continue to develop their capacities in the sphere of learning analytics (LA), it is critical to understand the experiences and expectations of students in relation to these practices. This presentation will discuss the results of the Data Doubles Project ([www.datadoubles.org](http://www.datadoubles.org)), a three-year research study at eight US higher education institutions that explored undergraduate students' awareness of LA-related collection of personally identifiable information, their expectations for ethical use of this information by educational institutions, and their perspectives on the privacy and confidentiality of these data. Using interviews, scenario-based focus groups, and a quantitative survey of over 2000 students, the Data Doubles Project demonstrated that students lacked awareness of educational data-mining and analytic practices, valued informed consent and transparency, and exhibited high levels of trust in their libraries and universities. However, students also expressed significant privacy concerns and clear limits on the scope of data collected about them. Based on these findings, this presentation argues that institutions must balance their desire to implement LA initiatives with their obligation to educate students about analytic practices, and that institutions must treat students as partners in the design of LA programs.

### ***Linked Library Data - Library Cooperation at its Highest potential?***

***Kaisa Hypén***

Service Manager, Library Services, Turku City Library, Finland

**Abstract.** The transition to the new information model of linked library data requires extensive changes in the infrastructure of libraries. We will finally leave the MARC format behind and move on to use BIBFRAME. New library systems are acquired, or old systems are converted to a new data model. Completely new applications, such as language-independent

ontologies, must be developed. These technology-related perspectives dominate the debate, and the discussion about why the change is necessary has received less attention. So, what is the idea of linked library data?

The most complete linked library data is realized when every new work that appears, for example a book, is cataloged only once in the entire world. When Annie Ernaux publishes a new novel, it – the work: title, author, content – is described, for example, in the National Library of France, and different versions, translations, editions, formats are linked to it in library systems around the world. This enables better and more accessible metadata, more equal access to information than before and thereby also strengthens democracy. Of course, it also makes cataloging work more efficient and frees up resources for other work done in libraries. That would be library cooperation at its highest potential. Of course, this is currently a distant dream that may never materialize as such. But in any case, steps in that direction can already be taken, to realize the vision gradually, piece by piece. There are currently 36 public library databases in Finland. More than half of them have been connected to the national metadata repository Melinda. Metadata of library materials is processed locally in all libraries that maintain these databases, in addition, the libraries collaborating with Melinda edit the metadata in Melinda. Metadata flows between different systems are complex, duplicate records and unintentional updates are created. According to a survey of libraries in 2021, more than 400 (about 11%) employees of public libraries participated in the processing of metadata, and about 128 person-years of work (about 4%) were used annually. Based on the answers, there is an opportunity to focus on metadata work only in the largest libraries. In smaller libraries, cataloging work was done in a hurry, along with other work, and there were concerns about the quality of the metadata. It is obvious that changes are needed. However, it is not enough to only look at public libraries, but an assessment of the entire metadata ecosystem is needed: what is the role of different actors (National Library, material suppliers, academic libraries), how metadata is changing at different stages of its life cycle. Could the idea of linked library data help find solutions to the challenges of the current situation? Could we apply the idea "a work is cataloged only once" and build a metadata infrastructure from that starting point on a Finnish scale? Could the solution be a shared master metadata repository, network-like cooperation, artificial intelligence? This is being studied in the Towards Metadata Vision -project, funded by the Ministry of Education and Culture and organized by the Turku City Library.



## ***Map/GIS Libraries' Collections and Services in Greece: Challenges and Opportunities***

***Ifigenia Vardakosta***

Harokopio University of Athens, Library & Information Centre, Kallithea, Athens, Greece

**Abstract.** Map/GIS Libraries are specialized organizations that provide access to maps, geospatial data, and related services to support education, research, and decision-making processes. The paper aims to present the current situation about Map/GIS Libraries in Greece while significant achievements and collections will be pointed out. Map/GIS Libraries face several challenges in meeting the increasing demand for geospatial data and analysis. The management of the geographical information, staffing, and funding issues will be highlighted while opportunities such as collaboration and open data initiatives will be emphasized as well. The paper concludes by proposing several actions that Map/GIS Libraries in Greece can adopt such as developing partnerships with other institutions, expanding their digital collections, and promoting their services to a broader audience.

**Keywords:** Map/GIS Libraries, Map/GIS Librarian, geographical collections, cooperations, networks, Greek Map/GIS Libraries.

## ***Measuring the Impact of Parliamentary Research Services: A Case Study on the Portuguese Parliament***

***Carla Barroso<sup>1</sup>, Margarida Cabral<sup>2</sup>, Leonor Calvão Borges<sup>3</sup>***

<sup>1</sup>Nova University of Lisbon, Assembleia da República, Portugal

<sup>2</sup>Assembleia da República, Portugal

<sup>3</sup>Coimbra University, Assembleia da República, Portugal

**Abstract.** Research can inform legislative policymakers and shape policy decisions, hopefully benefiting society; thus, improving dissemination of research to policymakers is important for developing effective public policies that improve the quality of laws and democracy. To address this concern and increase the practice of evidence-based policy making, information services must play an active role in collecting, organizing and disseminating reliable information in a timely manner, fulfilling the United Nations of the 2030 Agenda, whose 17 Sustainable Development Goals across the world are based on reliable information that enables public policies and provides for the people's participation in the public good. These goals targeting all sectors of society, includes and give libraries, archives, documentation centers or research services a specific role in order to achieve them. The role information services have upon the process of

gathering information and its diffusion is commonly acknowledged and thus determining the value of information can therefore be approached both in terms of the value itself and the value that the information services that collect, organize, disseminate and preserve have. In fact, by giving access to information or providing information products of specific subjects, information services do have a role in promoting democracy and provide information to support the decision-making process, which is also the case of research services in parliamentary organizations. Parliamentary research services appeared in the first half of the 20th century as documentation centers and developed towards specialized research and information treatment. These are services focused on parliamentary activity, with multidisciplinary teams that support the decision-making process informing the parliamentary debate.

The aim of this work is to present parliamentary research services mission and verify to what extent their impact on the community it serves is measurable through a case study in the Portuguese parliament research service.

In methodological terms, the work is developed in two moments:

- a review of the literature on parliamentary research services and their impact analysis
- a proposal for key performance indicators for the Portuguese parliamentary research service based on its mission and performance of its employees as a measurement unit for the management of its quality and satisfaction with its services.

The existence of measurable indicators, supported by evidence-based analysis, thus constitutes a way of measuring the quality and impact of these services, which is understood to be essential nowadays.

### ***Media Literacy in Russia: Current State and Opportunities***

***Irina V. Lizunova<sup>1</sup> and Evgeniya V. Pshenichnaya<sup>2</sup>***

<sup>1</sup>Doctor of Historical Sciences, Director, State Public Scientific Technological Library,

Siberian Branch of Russian Academy of Sciences

<sup>2</sup>Assistant Director for International Relations, State Public Scientific Technological Library, Siberian Branch of Russian Academy of Sciences

**Abstract.** In recent decades, huge flows of information, an uncontrolled rapid increase in their size, and a radical change in the media environment have begun to exert an increasingly powerful influence on the daily life, consciousness and behavior of contemporaries. The new information and media reality open up huge opportunities: for people - to improve the level and quality of life, for society - to strengthen social integration. In order to successfully realize these opportunities, to function favorably in a rapidly

updated media environment, individuals, institutions, organizations and countries need to have a set of essential competencies – media literacy, which allows them to solve technological, economic and social problems, as well as to reduce digital information inequality between people, communities and peoples. Media literacy involves the ability to work with any sources of information (oral, written, analog, electronic, digital), with all types and varieties of information resources, have critical thinking skills, comprehension and interpretation of information, the ability to evaluate it, systematize, use it in accordance with legal and ethical standards, if necessary, protect yourself from its negative impacts. Constant use of information and media technologies has become an integral part of the professional activities of specialists of various profiles, as well as an element of the leisure pastime of people from various social groups. Hence, there is an urgent need in society to introduce educational and social programs aimed at developing media literacy among the population. In 2010, UNESCO initiated a study of the level of media literacy in Russia within the framework of the project "Conceptual connection of information literacy and media literacy". It analyzed Russian publications on media education and information training for 1990 - 2010, involving a number of the most valuable works of an earlier period, as well as important analytical publications that appeared in 2011. The main institutions contributing to the development of media literacy are libraries, archives, museums, mass media, scientific and educational institutions, professional and public organizations. The study identified such main problems of information training and media education in Russia as the non-necessity of information training and media education, as well as the lack of a single coordinating center, a regulatory framework regulating and controlling the development of information training and media education of citizens.

The analysis made it possible to establish that the teaching of library and bibliographic literacy, reading culture, computer literacy, information culture is inextricably linked with library science, bibliography, book studies, documentation, computer science, pedagogy.

In 2017 Strategy for the development of the information Society in the Russian Federation for 2017-2030 was developed in order to further develop media literacy among the population and eliminate digital inequality in the regions of the Russian Federation. The main task of the Strategy is to create conditions for the formation of a knowledge society in the Russian Federation, as well as the formation of an information space considering the needs of citizens and society in obtaining high-quality and reliable information that will become the basis of the political, economic and sociocultural development of the country. Currently, based on the analysis of the survey of respondents, it can be argued that the ability to

effectively search and find the necessary information is quite common among the population of Russia. At the same time, the overall competence in the search for information turns out to be somewhat higher than the competence associated with the search for information in the Internet space. It is obvious that in the modern information space, not all information is important and deserves attention. This gives rise to another group of skills - the ability to protect yourself from malicious and redundant content. According to the survey results, today only about half of Russians (56%) say that they often compare information from different sources in order to verify it. Nevertheless, this is the highest indicator for the entire time of monitoring measurements since 2009: compared to the first wave, it increased by 10%. Further development and implementation of national and regional information and media educational programs, connection to its implementation of social institutions involved in the formation of knowledge, skills and abilities of media literacy, integration of efforts of stakeholders in the promotion of media and information competencies, will allow individual citizens and the community as a whole to use the richest information opportunities and advantages of the developing media environment to improve the quality of life, ensuring the strengthening of social integration.

**Keywords:** Media Literacy, media environment, Russia, social integration, information inequality, Strategy.

### ***Mining the Meaning in Student Chats: Using Template Analysis Methodology to Evaluate Learning Thresholds***

***Virginia M. Tucker***

School of Information, San José State University, San José, California USA

#### **Abstract**

**Introduction.** MLIS students frequently engage in online discussions with each other as they journey towards becoming information professionals who are ready to contribute to their communities in today's workplaces. These online discussions are rich sources of data about their learning experiences and about their trajectories towards professional readiness in the library and information sciences. This study explored this peer-to-peer discourse in an online MLIS course on advanced search techniques which had been designed around an established model for acquiring search expertise (Tucker, 2016) based on threshold concepts (Meyer & Land, 2003).

**Methodology.** The choice of template analysis methodology (Crabtree & Miller, 1992) for the study was solidly aligned with the search expertise model's multi-level structure for ways that learning the threshold concepts may be evidenced in student activities and experiences. This evidence of learning was elicited from the course discussion posts where students responded to prompts and interacted with each other.

**Conclusion.** Using template analysis methodology to analyze student chat in online discussions was shown to be an effective approach to explore student learning experiences as evidenced in written reflection and externalized in discourse with their peers.

**Objectives.** During this session, attendees will learn about template analysis methodology as applied to mining online discussions, and about ways the method may be applied to other datasets relevant in online learning environments. First, the presenter will discuss the study's research design, goals, and outcomes. Second, they will walk through the six stages of template analysis, using illustrations from the study, so that attendees learn about its application. Spreadsheets (using GoogleSheets) that were designed to support the methodology's stages and coding processes will be demonstrated and discussed. Third and last, facilitated questions at the end of the session will support integration of the approaches and concepts presented.

**References:**

Crabtree, B. F., & Miller, W. L. (1992). A template approach to text analysis. In B. F. Crabtree & W. L. Miller (Eds.), *Doing qualitative research: Multiple strategies* (pp. 93-109). SAGE Publications.

Meyer, J. H. F. & Land, R. (2003). Threshold concepts and troublesome knowledge (1): Linkages to ways of thinking and practising within the disciplines. In C. Rust (Ed.), *Improving student learning: Ten years on* (pp. 1-16). Oxford: OCSLD.

Tucker, V. M. (2016). Learning experiences and the liminality of expertise. In: R. Land, J. H. F. Meyer, & M. T. Flanagan (Eds.), *Threshold Concepts in Practice* (pp. 93-106). Rotterdam: Sense Publishers.

**Keywords:** MLIS students, online discussion, qualitative research methods, template analysis, threshold concepts.

## ***The Modern Library in the University Educational Space***

***Irena Peteva<sup>1</sup>, Elena Savova<sup>2</sup>, and Stoyan Denchev<sup>3</sup>***

<sup>1,2,3</sup>University of Library Studies and Information Technologies, Sofia, Bulgaria

**Abstract.** The library plays an important role in modern society, in which information, knowledge and innovation are leading factors. The traditional vision of libraries is rapidly supplemented and modified along with changes in the needs of economic and social development and as a result of the widespread application of new technologies, especially during crises (pandemic, economic, political, etc.).

The modern library should have several main characteristics: accessibility, adaptability, flexibility to public needs and openness to constantly developing information services and technologies. It must be able to provide the most complete access to information to the widest possible audience, satisfying their rapidly growing information needs in a modern, fast and efficient way relevant to their expectations. With such an approach, it retains its social significance as an educational, cultural and information center in the digital society in the conditions of a technological information revolution.

The paper examines the place and role of libraries, which in recent decades have become attractive and vibrant environments offering the full spectrum of print and virtual information; environments where user care is paramount and free access to information is a fundamental principle. Thus, the library is both traditional and digital, providing information, knowledge and services unlimited in time and space.

A central place has been given to the main mission of library and information specialists as organizers of knowledge, who on the one hand can and should navigate users in the multitude of diverse information arrays, and on the other - actively participate in the process of scientific communication in order to contribute for lifelong learning and continuous educational progress. This means that the modern university library should be able to meet the diverse educational and research information needs of students and university professors. Library and information professionals are required to be prepared to be a key factor in the educational and training environment for acquisition of informational competences.

**Keywords:** University Libraries, Educational Space, Information Competences.

### ***Navigating the Choppy Seas: Libraries protecting LGBTQ+ Students' Privacy Rights***

Paper sub-theme(s): Impact of Libraries in People's lives and communities / Social Inclusion

***Michele A. L. Villagran<sup>1\*</sup> and Darra Hofman<sup>2</sup>***

<sup>1</sup>Assistant Professor\* School of Information, San José State University, CA, U.S.

<sup>2</sup>Assistant Professor, School of Information, San José State University. CA, U.S.

\*1st author and corresponding author

**Abstract.** Contact tracing and other pandemic control measures posed additional dangers to marginalized communities not faced by members of dominant communities. This is because marginalized communities are more likely to be surveilled and policed by others. While there is almost universal agreement that privacy rights are critical, there is significantly

less agreement regarding what they are, whom they protect, and what the appropriate remedies are for privacy harm. In the case of LGBTQ+ students, issues of sexual privacy arise. Thus, it becomes clear that when considering the impact of COVID-19 contact tracing and other surveillance measures on LGBTQ+ students' privacy, substantial independent bodies of jurisprudence must be considered: data and information privacy, sexual privacy, and medical privacy. As the right to privacy – and the determination of what rights are “implicit in the concept of ordered liberty” – is determined by the courts, recognizing the privacy rights of LGBTQ+ people has been slow. The inability to predict how technology will evolve is deeply problematic to the individual in deciding how to weigh risks to their privacy. Furthermore, as the surveillance state continually expands, our privacy norms erode often in ways the data subject could not have foreseen and cannot mitigate against. In these contexts, the actions libraries take to protect their users' data – through data use and privacy policies, through the contracts they negotiate with their vendors – to empower their patrons through information are critical. This study examined how COVID-19 impacted LGBTQ+ university students, and how libraries can help to mitigate these risks. Given the incomplete legal protection of LGBTQ+ people in the United States – in everything from housing and employment discrimination to parenting to access to medical treatment – protecting one's privacy can be even more critical to ensuring the safety and well-being of LGBTQ+ people. This paper will discuss some of the major areas of law impacting LGBTQ+ students' privacy making clear the immense legal complexity that both libraries and librarians must navigate to protect LGBTQ+ students' privacy rights.

**Keywords:** LGBTQ+, COVID-19, Privacy, Contact tracing, Librarians, University student.

### ***A New Service to Evidence Library Impact: OPERAS Metrics***

***Brian Hole***

Ubiquity Press, Thessaloniki Greece

**Abstract.** This paper will present an overview of a new open source platform, OPERAS Metrics, which is well-suited to providing evidence of the impact of libraries in the publishing and archiving of scholarly content and cultural heritage materials.

Since 2020 Ubiquity has been involved with developing and maintaining the OPERAS Metrics service, an open source platform for open access content. The service is currently in beta phase, and used by 3-4 European publishers including Ubiquity and its partners. It will become available for wider use by other publishers and libraries in late 2023. It is also already

possible to self-host the platform under its open source license. The service provides publicly viewable metrics such as views, downloads, citations, and alt-metrics such as social media activity, wikipedia citations, numbers of annotations etc. A notable aspect of the service is that instead of just high-level numbers, it provides a comprehensive 'metrics profile' for an item, detailing all places where usage has occurred (for example not only downloads on a book publisher's website, but also at places such as DOAB, JSTOR and Google Books). As such, the service provides an alternative to others such as Plum Metrics or AltMetric, which is well suited to content in the Humanities and Social Sciences, and is community operated rather than controlled by the larger commercial vendors.

We will give a short overview and demonstration of the service, with a demo of its use for repositories, journals and books at both Ubiquity and our partner institutions, and a summary of the ways in which impact can be expressed for both authors and libraries.

**Keywords:** Impact, Metrics, Repositories, Journals, Books, Open source, Open access.

## ***Nexus Between Library and Information Science Education and Practice***

***Emmanuel Layi Adebayo***

Library department lagos state university, ojo, nigeria.

**Abstract.** Library and Information Science education and practice is about half a century old in Nigeria. It started in 1962 at the University of Ibadan and since then, quite a number of tertiary institutions (Universities, Polytechnics and Colleges of Education) have been running the programme under various certifications to provide the manpower needs of professional and qualified librarian for its institutions. The Nexus between LIS Education and Practice is like a puzzle of egg and chick, which one came first and against this background, this paper examined the roles of the colonial masters in educational development in Africa and vis-à-vis the influence of great library educators such as Melvil Dewey and other educators and the journey through Nigeria institutions. Despite the sound footing of LIS Education, Noise/Distracton which seems to be a major obstacle on the practice as well as mending the broken link were all examined in the paper. The several strategies and the way forward for overall development are suggested.



## ***No Library School? No Problem: Teaching Archives beyond the classroom***

for Best Practices Session (Virtual Component)

***Carrie P. Mastley***

Assistant Professor and Curator of Material Culture, Archives & Special Collections  
Mississippi State University Libraries, Mississippi State, U.S.

**Abstract.** Mississippi State University (MSU) offers sixty-nine master's degree programs spread across eight colleges. Degrees in library and archival science are not represented, and the most comparable program is a master's degree in history, which does offer some coursework related to public history. However, many students in the program have contacted the Division of Archives & Special Collections to inquire about internships or volunteer opportunities. Requests for this type of experiential learning have become so frequent that the library's administration became motivated to create two graduate assistantship positions in the Division to be offered to graduate students enrolled in the Department of History. Carrie P. Mastley was selected to supervise these students throughout the 2022-23 academic year. In this presentation, she will describe the partnership that exists between MSU Libraries and the Department of History and her methodology for educating these budding archivists without the support of a library school. She will share the training these students receive, typical projects that she assigns, and a reading syllabus that she created. Mastley hopes that others will learn from her experience and find similar workarounds to create experiential learning opportunities for students who want to gain a better understanding of library and/or archival work. This talk will demonstrate the importance of academic libraries taking note of the needs of their communities of users and finding creative ways to support their educational and professional goals.

## ***No Qualms about Partaking in Fake News: Equipping Undergraduates with Critical Media Literacy Acumen***

***Nandi Prince***

New York City College of Technology, City University of New York (CUNY), U.S.

**Abstract.** This really happened: Students in a three credit library course confidently declared that they could detect fake news with one hundred percent accuracy. The author accepted the challenge and provided various sources over a thirty day period. As the students dived into the fake news

challenge, they realized that misinformation and disinformation is prolific; social media contributes to the deliberate propagation; and the presentation of the formatting and references are often structured to look trustworthy and easily deceives users. They found the virality and their inability to ascertain the veracity of what they encountered, were the strongest elements they found disconcerting. When the students realized how frequently they have been duped, it generated much discussion about their own sense of trust as they reflected on their perceptions to distinguish what was trustworthy. Students overestimate their critical skills to detect disinformation in the information landscape (Nagel 2022). Faculty are concerned about the impact disinformation has on students, however they differ on the solutions that help educators connect students to information literacy (IL) (Saunders 2022). In this era of fake news prevalence, information literacy specific to each discipline is important in the classroom and the wider beyond. One of the primary tenets of education is providing information, the teaching and passing on of knowledge from specific disciplines to students. Incorporating IL should be embraced as a corporate responsibility. Fake news virality and students' informational behavior responses will be explored; through the insight gained from the 30-day challenge. Debunking fake news at an individual level and at the collective collegiate level – is critical in transforming how students seek, evaluate and use information. The ubiquitous access to social media (SM) and the gaggle of information they engaged in and shared was astounding. It is, therefore, believed that media and information literacy is indispensable to students (Al Zou'bi 2022). Students stated that they instinctively shared post read or viewed indiscriminately with other SM and non-SM users. An interesting phenomenon was the socio-economic factors influencing how disinformation was easily transmitted and thrived between social media participants and non-participants (Gadjanova, Lynch and Saibu 2022). Though students in the class were aware, and in agreement, that the college library has reliable resources; they admitted to frequently relying on information garnered from internet sources, and used social media instinctively to learn more about daily occurrences. This class challenge allowed students to learn to be intentional about pausing and thinking, engaging their information literacy skills to critically evaluate information they encounter and what their responsible role is in the participatory viral environment. Participants will take away strategies of teaching information literacy using the ACRL Framework; will better understand the impact the digital divide has on amplifying disinformation across original and indirect social media users in marginalized groups, and reflect on the social responsibility of librarianship. Students must be equipped with skills to discern fake news and equally important, the knowledge to find trustworthy and reliable information when they need it.

## References:

- Al Zou'bi, R M. 2022. "The impact of media and information literacy." Journal of Media Literacy Education 14 (2): 58-71. doi: <https://doi.org/10.23860/JMLE-2022-14-2-5>.
- Gadjanova, Elena, Gabrielle Lynch, and Ghadafi Saibu . 2022. "Misinformation Across Digital Divides: Theory And Evidence From Northern Ghana." African Affairs 121 (483): 161–195. doi: <https://doi.org/10.1093/afraf/adac009>.
- Nagel, Tyler W. S. 2022. "Measuring Fake News Acumen Using a News Media Literacy Instrument." Journal of Media Literacy Education 14 (1): 29-42.
- Saunders, Laura. 2022. "Faculty Perspectives on Mis- and Disinformation across Discipline." College & Research Libraries 83 (2): 221-245. doi: <https://doi.org/citytech.ezproxy.cuny.edu/10.5860/crl.83.2.221>.

**Keywords:** Disinformation, Information Literacy, Library Instruction; ACRL Framework, Social Media Literacy.

## *Of Likes and Downloads: Social Media Analytics vis-a-vis Online Library Resources Usage – The Case of Benilde's Center for Learning Resources*

**Michael Anthony A. Mojica<sup>1</sup> and Roselle S. Maestro-Fredeluces<sup>2</sup>**

<sup>1</sup>De La Salle-College of Saint Benilde, Manila

<sup>2</sup>De La Salle University

**Abstract.** Academic libraries utilize social media to increase their visibility in the virtual world and communicate to their users what they can offer. It also serves as a platform where library patrons can freely convey what they need from the library. When the COVID-19 pandemic hit, the De La Salle-College of Saint Benilde Center for Learning Resources (CLR) launched its Facebook page in June 2020 to reach out to the now-virtual learners and promote its online resources and services. This study aims to ascertain the impact of social media marketing on the use of online library resources of the CLR. To assess the effectiveness of CLR's Facebook page as a tool to promote online resources, quantitative data will be gathered via Facebook Insights and usage statistics will be generated via the administration platform of each online resource. Content analysis will be applied to study the Facebook post types, reach, and engagement and juxtapose these against online resources usage statistics for the period covering two years before and after June 2020. Results of the study will be used to provide insights to the social media marketing plan of the library, identify opportunities for better engagement, and address issues with online resources with low usage.

**Keywords:** Social media analytics, Online library resources, Usage statistics, Facebook Insights, Marketing plan.

## ***Online Information Access by Immigrants: Libraries Have a Role to Play***

***Yanli Li***

Wilfrid Laurier University, Waterloo/Ontario, Canada

**Abstract.** There are concerns that misinformation has bombarded social media and worsened mental health outcomes. Although some research has indicated that Canadians reported lower mental health, there are not adequate studies on the association between their online information seeking and mental health during the pandemic. As immigrants are a particularly vulnerable group, it is important to focus on their information seeking behaviours and mental health. As the pandemic is still not over yet, the findings from this research can give valuable insights into what libraries can do to support immigrants at the present time and for the future. Based on the microdata gathered by Statistics Canada regarding the information sources consulted during the pandemic, this research will focus on immigrants' online information access, including various information sources they used, how they validated the information, and how frequently they checked the accuracy of the information. Moreover, this research will provide an in-depth analysis of the association between their online information access and mental health outcome. In light of the research findings, recommendations are to be provided as to the roles of libraries in helping immigrants access online information. Public education is essential to develop their awareness of how to search and evaluate information for credibility and authority. Academic libraries and public libraries may take different approaches.

**Keywords:** Immigrants, Online information access, Library.

## ***Open Access to Important and Reliable Information Provides Fairness to Users***

***Tatyana Kaigorodova and Irina Kriukova***

World Health Organization Documentation Centre, based at the Federal Research Institute for Health Organization and Informatics, Moscow, Russian Federation

**Abstract.** Medicine is one of the most rapidly developing discipline and information in medicine and health care needs to be updated every 3-5 years. Availability of modern scientific databases and their accessibility for researchers provide research in medicine and health care with relevant information. The world has moved over to electronic information. Medical libraries in Russia follow the world's information trends. In recent years

Russia has seen emergence of new Russian databases and electronic journals. The WHO Documentation Centre based on Central Public Health Research Institute of the Ministry of Health of Russia was established in 1994 by the Order of the Ministry of Health No.124 of June 22, 1994. The goal of the WHO documentation centre is disseminating the information provided by the WHO and WHO Regional Office for Europe as widely as possible within the territory of Russia in Russian language.

**Purpose:** Analyze the use of WHO Documentation Centre website materials.

Methods: statistical, bibliometric and content analysis.

Objectives: To identify downloads of various materials from the WHO Documentation Centre website by subject, year of publication, etc.

**Results:** The WHO Documentation Centre has near 2628 WHO publications in electronic form. These publications are open access on the WHO Documentation Centre website with e-links to the WHO website and website of WHO Regional Office for Europe. It ensures WHO copyright compliance. The website has a system of electronic registration of website users and information downloads. With every access to the website, the user is registered automatically. By January 12, 2023, 3337757 users have visited the website; the number of downloads adds up to 2805353. We can also monitor scope of interest of our users by data on views and downloads of different publications. Electronic registration is open and every user can get familiarized with it. The website is updated weekly.

Open access to important and reliable information provides fairness to users.

### ***Precision Library Information Services to Support Researchers of an Emerging Field: A Case Study of Flexible Electronics***

***Ming Wu***

National Science Library, Chinese Academy of Sciences

Department of Information Resource Management, School of economics and management, University of Chinese Academy of Sciences, Beijing, China

**Abstract.** Flexible Electronics is an emerging research field. Flexible electronics is used (and can be used) by Application (Displays, Sensors, Thin-Film Photovoltaics, Batteries and Others) and by Verticals (Healthcare, Smart Consumer Electronics, Energy & Power, Aerospace and Others). Flexible electronics is gaining traction in the market owing to its flexible and stretchable properties. The global flexible electronics market is expected to reach USD 87.21 billion by 2024.(From Grand View

Research) This represents a huge opportunity for scientific research and development to rapidly and considerably advance this field, therefore attracts researchers of global attention.

National Science Library (NSL) is a research library attached to Chinese Academy of Sciences (CAS). NSL have a subject librarian's team with diverse subject background. One important role of subject librarians is to provide library services researchers of CAS. The idea of change in research libraries and the development of information technologies motivates subject librarians to think about ways of library precision services to support researchers, especially in an emerging and interdisciplinary research field. In this study, subject librarian took a case study of flexible electronics which focused on the needs of researchers by bibliometric analysis. Web of Science database (SCIE), Derwent data analyzer and VOSviewer software (visualizing scientific landscapes) were used as data source and bibliometric analysis tools of flexible electronics. The literatures published data were retrieved during the period of the past twenty years (2003-2022). The analysis dimensions included trends in the number of articles published, countries/regions, institutions, international cooperation and research hotspots, etc. The results showed that the annual number of publications in the field of flexible electronics worldwide has increased significantly in the last twenty years. The top three countries in terms of the number of publications were China, USA and Korea. Top three contributing institutions included Chinese Academy of Sciences, Tsinghua University and University of California System. The international cooperation between countries and research institutions are closer. Through the clustering analysis of author keywords of flexible electronics literature in the past ten years, it is found that the research hotspots mainly focus on 3 topics, including flexible electronics materials, device & applications and features.

Although it is a case study of an emerging research field, some useful information has found. Firstly, the bibliometric analysis results can help researchers' comprehensive understanding of research status and development trend of flexible electronics. Meanwhile cooperating with researchers, subject librarians can accumulate best practice experiences to utilize bibliometric analysis and visualized mapping in different fields. Finally it is important for research library to make more strategies and ways precisely providing information services and satisfying researchers' needs.

**Keywords:** bibliometric analysis, visualized mapping, an emerging field, a case study, library information services.

## ***Preferences of Students in Use of Audiobooks: A Case Study***

***Anna Novotná, Kamil Matula, and Ivana Kyselová Košková***

Institute of Computer Science, Faculty of Philosophy and Science, Silesian University in Opava, Opava, Czech Republic

**Abstract.** It has long been known that the younger generation prefers new types of media. Although audiobooks cannot be described as entirely new media types, the convergence of media to the Internet and the rise of Internet hypermediacy have influenced their consumption. We were interested in comparing preferences for audiobooks versus physical books, as well as understanding the content of audiobooks versus physical books. The results could be used either to compile a more detailed survey or to modify existing library services.

**Keywords:** Audiobooks, Physical books, Students-Preference, Preference.

## ***Prevention of Cyber Risks in the Library: Analysis of Information Security Awareness of Estonian, Latvian and Lithuanian Librarians***

***Kate-Riin Kont***

Estonian Academy of Security Sciences, Estonia

**Abstract.** The purpose of the study was to find out the knowledge, attitude and behavior of library employees related to information security in seven areas of the information security policy involving employees: password management, use of e-mail, use of the Internet, use of social media, mobile devices, handling of information and reporting of cyber incidents. The theoretical part provides an overview of the importance of the topic in the context of libraries, the reasons why information security and cyber security must be at the same high level in libraries as, for example, in banks or healthcare institutions - we can only imagine what would happen if the digitized cultural memory of three Baltic countries disappears or user data is leaked. Current knowledge of cybercrime is mainly based on the study of technical aspects, and only in the last decade has more attention been paid to the human aspects. Realizing that cyber security cannot be solved by technology alone and that the human being is the weakest link in cyber security, the human factor has been recognized as the weakest and most unclear link in creating a safe and secure digital environment. Therefore, several methodologies have been developed to study the information security awareness of employees of public sector organizations,

educational institutions, and private companies. The HAIS-Q (Human Aspects of Information Security Questionnaire) developed by Parsons et al. was used to collect data in order to assess information security awareness within the organization. The method is based on three factors developed by the same authors: the Knowledge-Attitude-Behaviour (KAB) model, which determines the security awareness of employees. The target group of the online questionnaire was Estonian, Latvian and Lithuanian librarians. A total of 388 librarians from Estonian, 352 from Latvian and 437 from Lithuanian public, research, school and specialist libraries responded to the survey. The mean and standard deviation of each focus area, descriptive statistics, Cronbach's coefficient and Pearsons correlation analysis were used to achieve and analyze the research objective and compare the results. The results revealed that the chosen methodology is well suited for assessing the cyber literacy of not only library employees, but also employees of all memory institutions (archives, museums) and identifying training needs.

**Keywords:** Cyber security, Information security awareness, Libraries, Librarians, Human factor, KAB-model, HAIS-Q.

### ***Promoting Academic Writing Literacy by Training Programs: Evaluation Based on the One-Group Pre-test/Post-test Design***

***Cheng Bing<sup>1</sup>, Li Ling<sup>1,2</sup>, Liu Yanan<sup>2</sup>, Du Jiangyuan<sup>3</sup>***

<sup>1</sup>Corresponding Author: PhD, Associate Professor, Scholarship Librarian, National Science Library, Chinese Academy of Sciences, Beijing, China

<sup>2</sup>University of Chinese Academy of Sciences, Beijing, China

<sup>3</sup>Shanghai Normal University, Shanghai, China

**Abstract. [Purpose]** Writing research papers for publication in international academic journals is necessary and important for researchers. Almost all researchers have to practice academic writing skills during their research career. Specific academic writing education programs are being developed in various academic libraries to promote academic writing. One online short-term summer training program was designed for this purpose which has attracted researchers to register for the training. This study aims to evaluate the effect on improving the writing skills for researchers attended the short-term training course.

**[Methods]** The pre-test/post-test design (PPD), one of the most frequently used experimental methods and particularly popular in educational research, is used in this study. The effective sample was composed of 574 researchers who completed the self-assessment questionnaires. Totally 17

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<sup>1</sup> \*Corresponding Author: PhD, Associate Professor, Scholarship Librarian, chengbing@mail.las.ac.cn.



questions were designed to evaluate the effects. The SPSS statistical analysis was used to analyze the data.

**[Results and Conclusion]** The results show that researchers improved their writing skills through the short-term training, which show significant difference between the experimental and the control groups. It also shows difference between the researchers with different characteristics, studied in different stages, ever published English academic articles, or ever learned the writing curriculum before. These results are useful for an academic library to explore educational activities on academic writing. This study provides pioneering evidence for testing the effectiveness of the training on academic writing on promoting the writing skills for English-as-a-second-language (ESL) researchers.

**Keywords:** Academic writing skill, training program, pre-test/post-test design, English as a second language (ESL)

***Public libraries in Delaware (USA) and their communities in the face of COVID-19.***

***A mixed-methods study on the impact of libraries' adaptation to changing needs***

***Cornelia Posch***

Graduate Research Assistant, E.L. Quarantelli Resource Collection  
Disaster Research Center, University of Delaware, U.S.

**Abstract.** Public libraries played a crucial role in the local response to the COVID-19 pandemic by supporting their communities in traditional and new ways, adapting to evolving public health guidance as well as changing patron needs. While lockdowns made their established operations all but impossible to carry out, library staff and administrators strived to assist patrons who did not have reliable internet and devices at their homes, to transfer as many of their activities and services to the virtual space as possible, and to cooperate with public health officials and social services, disseminating information about best practices to 'stop the spread' and about government assistance for small businesses as well as families and individuals who lost their jobs. Not being able to use the library building for such an extensive period of time paradoxically made more visible the importance of the library as a space for the various activities and simply as a place to be for many patrons. Once the library buildings were allowed to open again, library staff continued to adapt their services to follow restrictions (e.g. occupancy limit), to address changed/changing patron needs and habits, to develop their own "new normal". The libraries became distribution centers for test kits, the book mobile turned into a vaccination

bus, and more than ever, library staff tried to aid those who were among the most vulnerable and hardest hit by the health, educational, and economic crisis.

Public libraries play a key role in the response and recovery of a community after a disaster (Zach, 2011; Bishop & Veil, 2013). They are among the most ubiquitous civic networks in both urban and rural areas of the United States (ALA, 2012), making them an ideal web of resource-sharing. They are also a setting for social participation and social bonding, particularly critical in today's fragmented society (Klinenberg, 2018). After a disaster, public libraries often become vital hubs for both citizens and responders, where information, material resources, and assistance can be offered, requested, and coordinated (Veil & Bishop, 2014). Early on in the COVID-19 pandemic, public libraries shifted operations to account for the changing needs of their patrons (Wahler et al, 2021).

This talk will give insight into my ongoing dissertation research that examines libraries' contributions to the wellbeing – physical, mental, emotional, occupational/educational, financial – of their communities, by analyzing what they did, how they did it, and why they did it. After an extensive document analysis and statistical review of programming and services, I will be conducting interviews with librarians and library administrators (interviews will start March 2023). I hope for results that will inform library education and administration, hiring mechanisms and outreach activities, as well as funding and governmental support.

### ***Public Library as a Promoter of Democracy and Active Citizenship How to Detect Fake News?***

***Jasmina Ninkov<sup>1</sup> and Isidora Injac<sup>1</sup>***

<sup>1</sup>Belgrade City Library, Serbia

**Abstract.** We live in a so-called post-truth era where objective facts are less influential in shaping public opinion than appeals to emotion and personal belief. We live in a world where the role of media has been so important that the term 'mediacracy' (the rule of media) has been frequently used to describe it. We live in an information bombardment world where it is hard for citizens to make decisions due to plenty of (unreliable) information. The importance and need for developing citizens' media/news literacy skills have clearly been identified in many research and strategic documents. Published studies and reports indicate that the news literacy of citizens at the European level is unsatisfactory. It is particularly worrying that different initiatives and activities for improving media literacy are

mainly aimed at children and youth, while adults are almost completely excluded as a target group. Also, activities are mainly foreseen at the formal education level, while there are no strategic plans for informal education. Belgrade City Library (BCL) has introduced a new innovative service for education in news literacy and correct understanding of the news. As part of the international Erasmus+ project, it has developed an online platform for education in news literacy and correct understanding of the news. Belgrade City Library was one of four partners in this two-year project (2020/2022). Our partners were National Library of Latvia, Hacettepe University (Turkey) and UPI - Adult Education Centre from Žalec (Slovenia). Our Library coordinated the entire project.

There are two modules of the news literacy online course: one for all citizens and the second for educators (trainers, librarians, teachers, etc.). A particular version of the course has been developed for those who want to become trainers in this field. This course contains general detailed instructions for conducting workshops. Access to the course is free. For people who prefers face-to-face work, we organize workshops/seminars for our citizens. Selected BCL librarians underwent News Literacy Training for trainers and they educate people in our library. These trained librarians also educate their colleagues from Serbia so we will successfully complete a project and its goals.

Course participants can learn about news literacy and its importance to an individual and society, how to recognize manipulative media techniques, how to separate fact from fiction, how to identify fake news, photos, video content and social media accounts, what are algorithms, news feed, filtered bubbles, echo chambers, etc. The overall project objective is to contribute to the development of self-aware citizens who think critically and correctly understand media content.

Media literacy is an essential skill in the digital age. Today it is easy for anyone to create media and it is very hard to detect fake news, to know who created something, why they made it. This makes media literacy necessary to learn and teach. Librarians know how to do that. Public libraries are the best place for that.

**Keywords:** News Literacy, Fake News, Critical Thinking, Understanding News, Misinformation, Disinformation.

## ***The Reading Effects of Basic Education Reform and the Opportunities and Challenges of Libraries: A Current Observation from China***

***Zhang Jing, Luo Jianfan***

Sun Yat-sen University, School of Information Management, Guangzhou, China

**Abstract.** In China, primary and secondary school libraries and public libraries have ushered in the opportunities to play their educational functions due to the introduction of the Double Reduction (DR) policy in the field of basic education. DR aims to solve the problem of excessive burden of homework and off-campus training for students in the compulsory education stage, as well as excessive financial and energy burden on parents, so as to maintain the achievements of educational reform and development, and promote students' all-round development and healthy growth. According to the policy logic, this study puts forward eight predictions of reading effects caused by DR, intersecting the impact of this policy on relevant groups in terms of reading cognition, reading behavior, reading services, and reading support. Then it verifies the predictions of reading effects through multiple perspectives including the data from reading surveys and library annual reports, library reading activities, strategic planning texts of government sectors and libraries, and stakeholder surveys. This study also discusses whether libraries in China can seize and deal with the opportunities and challenges brought by the reading effects of DR, and how to realize the innovative development of the library educational functions. It points out that the shortage of staff and professionalism in the construction of the professional librarian team in China's primary and secondary school libraries will make it difficult for school libraries to grasp the opportunities on their own, and the challenges faced by libraries mainly lie in how to play the role of supporting students to complete formal education at all levels, which was paid less attention in the past. For these two issues, library-school cooperation is particularly important. It is not only an effective breakthrough, but also a key point to connect the significant practices of libraries.

## ***The Reading of Cultural, Natural and Intangible Heritage: Contribution of Libraries to its Promotion and Preservation***

***Elsa M Ramírez Leyva***

Researcher, Library and Information Research Institute

National University of Mexico, Mexico

**Abstract.** The cultural and natural, tangible and intangible heritage, made up of a legacy of various assets, is made up of artistic works, documentary sources in written, visual, sound, analog and digital formats such as books, photographs, scores, maps, recordings, videos or a variety of objects and instruments for different uses; as well as spaces, buildings, rituals, traditions, legends or gastronomy, apart from the different natural elements, animal and plant species, with all of which the identity of a people is created, for which their preservation must be valued and cared for. Cultural, natural, and intangible heritage assets are considered sources of rich and varied original and primary information that is represented in signs that make up complex languages. For its decryption, interpretation, description and understanding, reading processes and modalities are required in which the five senses must intervene, the aesthetic, cognitive, superior thinking capacities and, in addition, the knowledge of each person, but it is also necessary resort to research in different disciplines, in order to achieve a fuller understanding of the information provided by heritage assets, and for this reason they are valued, also as part of the cultural identity of the communities, which contributes to preserving and disseminating it from one generation to another. In addition, the librarian requires complementary information to generate cataloging processes and other tools, such as thesauri, which are part of the preservation and dissemination of heritage assets.

The research that I carry out consists of developing a method that integrates the aesthetic and academic reading of different languages, with the support of the iconographic, metacognitive method, documentary research that includes informational and digital capacities, based on different types of heritage assets, in order to contribute to the comprehensive training of librarians with the aim of incorporating said heritage in reading promotion activities and in the cataloging process and development of tools such as thesauri and thereby contribute to its dissemination and preservation. The method will be tested among students of the courses reading and communication and cataloging.

## ***Reimagining the Leatherby Libraries: A futuristic Look***

***Essraa Nawar<sup>1</sup> and Kevin Ross<sup>2</sup>***

<sup>1</sup>Leatherby Libraries Development Librarian, Chair, Arts, Exhibits and Events Committee,

Chapman University, California, U.S.

<sup>2</sup>Dean, Leatherby Libraries, Chapman University, California, U.S.

**Abstract.** The Academic Library of the Future offers a vibrant library, a center of academic discovery, an intellectual hub, a place where state-of-the-art and cutting-edge technology, collaboration, and social connection will serve both a current and future diverse population of students, faculty, and researchers.

The Leatherby Libraries has three goals: 1) Empowering student success, 2) Supporting campus research initiatives, and 3) Supporting Chapman University to become the best possible R2 level institution. Within these three goals, there are three value propositions including: 1) personalized service through targeted services, 2) seamless access through physical and digital resources, and 3) opportunities for collaboration through partnerships. Additionally, five enablers have been identified that offer some specific recommendations regarding 1) the reimagining of facilities (space optimization), 2) diversification of resources, 3) support of research and data analytics, 4) embedding information literacy throughout the curriculum, and 5) embracing innovative technology.

In this presentation, the team will showcase how the library team reimagined its spaces, services and workforce so that functions such as the creation of a Research & Technology Support Center, Bookbot, Makerspace, a variety of study rooms, outdoor study areas, and Data Visualization Wall, Lab or Catalog are provided as additional services and resources for our Chapman University community that will serve the current and future generations of faculty, students and staff. Additionally, we will be showcasing how we are aligning the library with the university's mission to support research and have created a Library Research & Data Services (LRDS) team. This innovative team provides support and guidance to the Chapman University research community, with a focus on empowering students, faculty, and staff. Their services include workshops, individual consultations, assistance in the use of research and data mining tools, data management plans, data analysis, data visualization, and text and data mining.

The Library of the Future is an opportunity for all of us to enhance the Chapman Experience for our students, faculty, and researchers, and the Leatherby Libraries have taken the leadership and fully engaged in this important vision on behalf of our university.

## ***The Re-immergence of Cartographic and GIS Services at the University of Pittsburgh Library, 2017-2022***

***Boris Michev***

Liaison Librarian, GIS, Urban Studies, Social Sciences & Maps, 402 Hillman Library, University of Pittsburgh, Pittsburgh, U.S.

**Abstract.** Scholarly interest in mapping and GIS is both increasing and broadening. As one group of GIS librarians notes, demand for geospatial resources been observed for several years, [but] recent growth has come not only from established GIS users, but also from a widening breadth of disciplines interested in geospatial tools and resources. At a more basic level, there is also an increasing consensus that spatial literacy and geographic awareness are fundamental life skills. Coming from a university with solid traditions in cartography and GIS, I was interested to observe what the situation was at the University of Pittsburgh when I accepted a position there two years ago. As seen from two documents produced by the University Library System, the importance of these trends was recognized in the annual fiscal year plan by chartering in 2016 a project team to produce a report with recommendations for the development of spatial services in order to promote the ULS' role as a campus hub for geospatial data activity and expertise. In the proposed presentation, I will explore and review the main strategic areas identified by the project team, some specific actions I undertook based on the report's recommendations, accompanied by illustrations. I will touch especially on a very impressive digital project, Historic Pittsburgh, which comprises primary and secondary sources about the greater Pittsburgh region, including a wide range of maps, manuscripts, visual images, and other materials that support personal and scholarly research. The cartographic highlight is an online map collection<sup>3</sup> comprising 47 volumes (1,800+ plates) published by the G.M. Hopkins Company for Pittsburgh.

I will also describe several faculty projects that needed extensive cartographic assistance, most notably the interactive map I created for the Mapping Religious Pittsburgh project and original maps created for a published article and an upcoming book by Patrick Manning, Past President of the American Historical Association.

## ***The Research Librarian – What New Role Can Citizen Science Offer?***

***Kiran Kaur and Nurfarawahidah Badrusham***

Department of Library & Information Science, Universiti Malaya, Malaysia

**Abstract.** Active citizenship or engaged citizenship has the intent to connect people within trusted communities to develop skills and knowledge based not only on their resourcefulness, but also guided tools and knowledge. Libraries have been in the forefront of Open Science, of which citizen science is a strong pillar for success. When people and communities are brought together in a citizen science project to engage in scientific research activities, libraries have the opportunity to present them with the infrastructure, information literacy skills, including research skills, data management and most importantly develop resilient societies that are knowledgeable and able to actively contribute to scientific research. Sadly literature reveals that the uptake of Citizen Science projects by academic librarian in the South East Asian countries is lacking. This study aims to ascertain the level of engagement of Malaysian university librarians in citizen science projects at their campus. The engagement level is determined at multiple dimensions of cognitive, affective, social, behavioural and personal motivates. The population under study are librarian in six of the research intensive universities in Malaysia. Each Library has a research support unit that engages actively with the researchers at the university. A survey design is implemented to collect data using an online questionnaire. The study asserts that the current support services such as research literacy instructions, data management, provision of search tools, help with open educational resources (OER), provision of subject guides, publishing strategies, research consultations, are among the expertise that can be shared with researchers in citizen science projects on campus. The feeling of commitment, recognition, credibility and efficacy among the university librarians varied vastly. Much depended on the social connections they had with the their counterparts at the faculty to which their role as liaison officers were expanded to. The main tasks in which librarian could be of use would be in the promotion of activities and the recruitment of participants. Librarian have the ability to train in research skills, although provision of research tools, especially technological tools may be a challenge due to insufficient funds. The findings would be very useful to both academic libraries and university citizen science projects managers who would like to see the projects succeed with a larger participation of members of the society. It can allow



librarians to seek opportunities for future involvement in citizens science to promote active citizenship among university campus society. The instrument used in the study offer university librarians a method to gage their current level of engagement with citizen science projects and address the gaps to elevate their active involvement in the near future. Extensions from this study could look into a comparative study between other countries in South East Asia so that generalizations across the institutions could be inferred.

### ***The Research Library as an Educational Hub***

***Evgenios Vlachos, Mogens Kragsig Jensen, Jakob Povl Holck<sup>1</sup>***

<sup>1</sup>Research librarian, The Library of the University of Southern Denmark, Denmark

**Abstract.** At present, the services of modern university libraries are constantly modified to suit new demands from the libraries' patrons who have expanded their interests beyond traditional library resources, like books on shelves or electronic materials. Today, patrons seem eager to ride the wave of current trends within the fields of Digital Humanities, Open Science, Research Data Management, Bibliometrics, Literature Search, Citizen Science, and Responsible Conduct of Research to name a few. Libraries must also be able to adjust to global movements like the Sustainable Development Goals that aim towards inclusive quality education and lifelong learning, and international agreements that promote good science practices. This means conducting courses and workshops for researchers, students, and, also, schooling the library staff with train-the-trainer events. This study presents an overview of educational initiatives concerning the above mentioned service trends in university libraries across Scandinavia. The goal is to highlight sub-trends within the larger fields of interest and point out predominant features. The overview is based on searches for the educational services on Scandinavian university library homepages. These have been sampled, based on the ranking of the 20 best Scandinavian universities (<https://www.study.eu/article/the-20-best-universities-in-scandinavia-rankings>) – with the expectation that the ranking will also be reflected in the university library services.

## ***Responding to Labour Market Needs in Industrial Property Education in Slovenia and Croatia. How Can Academic Libraries Contribute?***

***Tjaša Jug<sup>1</sup>, Polona Vilar<sup>1</sup>, Katarina Švab<sup>1</sup>, Denis Kos<sup>2</sup>, Sonja Špiranec<sup>2</sup>, and Mihaela Banek Zorica<sup>2</sup>***

<sup>1</sup>Faculty of arts, University of Ljubljana, Slovenia

<sup>2</sup>Faculty of humanities and social sciences, University of Zagreb, Croatia

**Abstract.** This paper will report on preliminary findings of an ongoing international ERASMUS+ research project «IPEDU - Introducing Intellectual Property Education for Lifelong Learning and the Knowledge Economy». The IPEDU project is led by the Technological University of the Shannon: Midlands Midwest (Ireland) in cooperation with the project consortium (see IPEDU, 2021). The project aims to make expert interventions in current educational programs for librarians, information professionals and staff at technical universities in Europe to bolster industrial property (IP) education. There is a demand in the labor market for workers who have a high level of awareness and competencies in the IP field (Soetendorp 2008). Academic librarians are slowly transforming from mere instructors to active collaborators in the educational process (Corrall & Jolly 2019). Many academic libraries today employ a copyright expert (Schmidt & English 2015), or a similar special professional profile. Interestingly, most of these profiles have a degree or background in Library and information science rather than formal legal education (Patterson 2016). However, currently there seems to be little evidence that librarians are recognized as partners and contributors to the development of competencies and skills in the field of IP rights. The research presented here aims to address this research gap by exploring the awareness about IP skills and competences of non-lawyers (engineers, scientists, business managers, etc.) within labor markets. This paper compares the preliminary findings of two partners, Croatia and Slovenia, who have comparable educational contexts. The comparison is natural due to the common historical background of both countries, and similar organization of educational and economic systems. An online survey was compiled by IPEDU team members and the same survey was distributed in all participating IPEDU countries in order to get comparable results. The survey contained 11 menu-based, Likert-scale, and alternative questions asking about various aspects of IP in the workplace. The target population were companies and offices that deal with IP, work with employment candidates, or have an IP department or function, and also employ technical profiles. Although the response rate was low in both countries (18 in Croatia and 59 in Slovenia), responses reflect attitudes and needs of

employers regarding IP competencies and indicate possible directions for the involvement of academic librarians in IP education.

Acknowledging low response rates, results show that employers value IP competencies of their employees and acknowledge their positive impact, but they don't seem to perceive them as decisive for the success of their company. The results highlight similarities and differences regarding the types of IP-related competencies Croatian and Slovenian companies value. A common conclusion is that employers value organized training events but these are organized inadequately and outside specialists are preferred when dealing with IP issues.

This paper will, based on the results of original research, offer practical and methodological recommendations to improve the work of higher education institutions, strengthen the role of libraries in IP education and the ways in which they can connect with the needs of the economy in this sector.

### **References:**

1. Corral, S., & Jolly, L. 2019. Innovations in learning and teaching in academic libraries: Alignment, collaboration, and the social turn. *New Review of Academic Librarianship*, 25(2-4), 113-128.
2. IPEDU. 2021. "IPEDU". Last modified 24.09.2022. <https://www.ipeduproject.eu/>
3. Patterson, E. 2016. The Canadian university copyright specialist: A cross-Canada selfie. *Partnership: The Canadian Journal of Library and Information Practice and Research*, 11(2).
4. Soetendorp R. 2008. Teaching intellectual property to non-law students. In Takagi, Y., Allman, L., & Sinjela, M. (Eds.). (2008). *Teaching of intellectual property: principles and methods*. Cambridge University Press.

**Keywords:** Industrial property, Education, Croatia, Slovenia, Labor market needs, Academic libraries.

## ***Revisiting the Standard: Linking PNU OBE BLIS Curriculum to the Competency-Based Standards for Filipino Librarians***

***Joemar D. Sajona***

Director, Management Information Systems Office / Assistant Professor  
Philippine Normal University, Manila, Philippines

**Abstract.** The Library and Information Science (LIS) Program is vital in the practice of education and training of library professionals in the Philippines. To further illustrate the embodiment of professionalism among librarians, the Professional Regulation Commission (PRC) promulgates the adoption of the "National Competency-Based Standards for Filipino Librarians". This standard is widely used as the reference of all LIS Schools in terms of crafting and implementing their curriculum specific to librarianship. The Philippine Normal University is one of the institutions that are offering a Bachelor in Library and Information Science

(BLIS) as a program and was already offered in an outcomes-based curriculum. To check its effectiveness and relevancy, a curriculum audit was done.

The objective of the curriculum audit was to assess the alignment of the revised BLIS Curriculum of Philippine Normal University vis-à-vis the National Competency-Based Standards for Filipino Librarians (NCBSFL) using the language of the standard. Basic and differentiated auditing including heat map was utilized to identify gap/s. The audit covers only the LIS Specialization Subjects (Core and IT Courses), Elective Courses, Reading Courses, and Library Practice Courses. Content and Linguistic Analysis was used to facilitate the study while CQA form was used to document the mapping. Findings revealed that there is a full alignment of the BLIS Curriculum in terms of the personal and professional competencies when analyzed using the language of the standard. However, it can be noted also that there are gaps that were not addressed in the standard. There were also partial alignments indicated based on the standard.

**Keywords:** Education and Research, LIS Education, LIS Curriculum, Curriculum Audit, Curriculum.

### ***The Role of Libraries in Fostering a Knowledge-Based Economy Education***

***Nour Eldin Mohamed Elshaiekh<sup>1</sup>, Naifa Bait Bin Saleem<sup>2</sup>,  
and Naifa Bait Bin Saleem<sup>3</sup>***

<sup>1</sup>Department of Information Studies, College of Arts and Sciences, Sultan Qaboos, University Muscat, Sultanate of Oman

<sup>2</sup>Department of Information Studies, College of Arts and Sciences, Sultan Qaboos, University Muscat, Sultanate of Oman

<sup>3</sup>Department of Information Studies, College of Arts and Sciences, Sultan Qaboos, University Muscat, Sultanate of Oman

**Abstract.** The significance of libraries in fostering a knowledge-based economy education cannot be overstated in the present-day scenario of a rapidly evolving information landscape. Libraries serve as pivotal hubs for knowledge generation, dissemination, and preservation, and play a crucial role in supporting individuals, organizations, and communities in acquiring and utilizing knowledge to catalyze innovation, entrepreneurship, and economic growth. By providing access to information and technology, imparting training in digital literacy and critical thinking skills, and facilitating local content creation, libraries are instrumental in establishing the foundation for a knowledge-based economy education.

The knowledge economy is generally referred to as the information economy and has been observed to have witnessed significant growth in

various sectors. Despite the challenges in estimating the size of these sectors, most studies have resorted to evaluating the contribution of the knowledge economy sectors to the Gross Domestic Product. Education in a knowledge-based economy education focuses on providing hands-on and real-world learning experiences, as well as teaching interdisciplinary and collaboration-oriented problem-solving methods. This education aims to cultivate creativity, flexibility, and a lifelong learning mindset, as the constant advancements in technology and shifting market dynamics require individuals and organizations to continuously adapt and evolve. By collaborating with businesses, governments, and other organizations, libraries can aid in bridging the digital divide and guarantee that every individual has the chance to participate in and reap the benefits of a knowledge-based economy education.

The present study aims to use the review of related researches as a technique for data collection and a narrative review, a systematic review, or a meta-analysis in order to achieve its established objectives.

As knowledge-based economy education becomes increasingly vital, numerous libraries are encountering difficulties in providing effective support for this form of learning. The aim of this research is to study the obstacles faced by libraries in promoting a knowledge-based economy education and to uncover the most efficient techniques and strategies for overcoming these hurdles.

**Keywords:** Knowledge based, Knowledge based economy, Education, Libraries.

## ***The Scientific Publications of Researchers Affect the Quality of Science – True or False?***

***Petruša Miholič***

Institute of Metals and Technology, Slovenia

### **Abstract**

**Introduction:** The success of research work is assessed through the publication of research results in scientific journals and with citations of published articles. The role of researchers' scientific publications is important from two aspects. Information sources are so crucial for progress in research because without them there is not and would not be successful research work and its results. At the same time, scientific publications of researchers directly affect the quality of scientific fields or science itself, i. e. they are the source of information. In this regard, the impact of scientific publications is extremely important, as it reflects the quality and allows through scientific publications to evaluate the research success of their research work.

**Methodology:** Focusing on the 2015-2020 period, we have examined how many scientific papers (articles) written by the researchers at the University of Primorska have been indexed in Web of Science, where the scientific papers (articles) were published and what the researchers cited in the published scientific papers (articles). The research included scientific papers (articles) published in the scientific journals of Science Direct, Springer Link, and Wiley Online consortia.

**Conclusion:** Based on the obtained results presented in the paper, we wondered whether what was written in the introduction (the scientific publications of the researchers directly affect the quality of the scientific fields) is really true.

**Keywords:** Scientific papers, Citations, Researchers, University of Primorska, Slovenia.

## ***Smart Digiline - Machine Learning for Digitization of Printed Heritage***

***Martin Lhoták and Filip Kersch***

Library of the Czech Academy of Sciences, Czech Republic

**Abstract.** Czech libraries hold extensive collections of monographs and periodicals, whose condition gradually deteriorates, mainly due to paper decay and heavy usage. There are major efforts to preserve the printed originals through restoration and conservation, yet it is digitisation that is essential to restore the information contained therein and thus preserve cultural heritage in the long run. It significantly reduces the damage to the originals and at the same time makes their content available to the general public. However, the capacity of libraries' digitisation departments is often limited by the inherently manual nature of their work, causing fewer pages to be digitized annually than are actually added to library collections. Thus despite the best efforts, a number of older documents are gradually deteriorating. Many of them have become unavailable to library users in order to protect them from complete decay.

The project Smart digiline aims to create a semi-automatic digitisation line using machine learning tools to increase the efficiency of the digitisation process and, where possible, replace a number of manual activities by modern software. The pilot digitisation line will combine existing tools with tools developed specifically for the needs of library digitisation departments. The output of the project can be used by digitization departments of large Czech or foreign libraries, either as a local installation or as an online service provided by the National Library of the Czech Republic or by another institution. The project will develop software tools

and guidelines for the alignment and scaling of scans and photographs as well as tools for machine generation of structural metadata.

***A Strategic Model to Harness the Accessibility to Medical Information by Rural Medical Officers in Sri Lanka: An Analysis of the Status of Medical Information Provision and Barriers to Access***

**M.P.P. Dilhani**

Senior Assistant Librarian, Postgraduate Institute of Medicine, University of Colombo, Sri Lanka

**Abstract.** The present study attempts to identify the information needs perceived barriers and challenges of MOs attached to “Primary Medical Care Units” (PMCU) (rural) hospitals in Sri Lanka. Construct (1) items related to MIN information 0.759 AVE; (2) medical information sources 0.752 AVE; (3) obstacles to access to medical information 0.608 AVE; (4) medical information channels 0.944 AVE and (5) determinants of medical information channels 0.966 AVE. Internet, medical blogs, medical devices, and personal contacts with colleagues were most highly used as a source of information. Further, most MOs suggested that if the medical authority could develop a proper medical system to help MOs obtain health education, that will be a fruitful activity for the country.

**Keywords:** Medical Information Needs, Medical Information Sources, Medical Information Channels, Barriers to Medical Information Barriers, Rural Hospitals, Sri Lanka.

***Strengthening Health Literacy in Library Practice – Activities of the National Medical Library, Prague***

***Helena Bouzková<sup>1</sup>, Eva Lesenková<sup>1</sup>, Jitka Feberová<sup>2</sup>, Filip Kříž<sup>1</sup>, and Vladimíra Procházková<sup>1</sup>***

<sup>1</sup>National Medical Library, Prague, Czech Republic

<sup>2</sup>First Faculty of Medicine, Charles University, Prague, Czech Republic

**Abstract.** In its introductory part, the contribution on the topic of strengthening health literacy in library practice focuses briefly on the characteristics of the role of public libraries as educational institutions which can help develop citizens' literacy. Subsequently, the contribution introduces the results of activities related to NML's support of health literacy. The National Medical Library, in collaboration with the Institute for Health Literacy and other educational entities, helps foster health literacy and informs the public about where to look for verified information. In this regard, the priority activity since 2018 has been the creation and operation of the MedLike portal. Statistics and the utilisation

of data related to the number of visits to the portal, the number of users and their interaction with the portal will be presented, as will our collaboration with the National Health Information Portal of the Czech Republic. Educational activities aimed at supporting health literacy will be presented by publishing the results of the e-learning course “Health Literacy 2022: How to Better Evaluate the Veracity of Health Information”, which was created in collaboration with the National Medical Library, the First Faculty of Medicine at Charles University and the Institute for Postgraduate Medical Education, with a special programme VISK 2 subsidy from the Czech Ministry of Culture and support from the Medical Libraries’ Club. The course was aimed at expanding knowledge of the topic of health literacy in terms of caring for one’s own health and represented an opportunity for Czech librarians to apply the knowledge acquired in their own educational practice in public libraries.

In conclusion, recommendations are proposed to increase the efficiency of information and educational activities in libraries so as to strengthen health literacy.

#### **References:**

Robinson, Lyn, (2010). Understanding Healthcare Information, London, Facet Publishing. ISBN 978-1-85604-662-6.

Truccolo, Ivana et al. Patients and caregivers' unmet information needs in the field of patient education: results from an Italian multicenter exploratory survey. Supportive Care in Cancer [online]. 2019, 27(6), 2023-2030 [cit. 2021-8-30]. ISSN 09414355. Dostupné z: doi:10.1007/s00520-018-4439-z

Dalrymple, Prudence W.; Brian Galvin, (2020). Growing community health literacy through libraries: sharing global perspectives. Berlin: De Gruyter Saur. IFLA publications. ISBN 978-3-11-036251-0.

Kickbusch, Ilona, Pelikan, Jürgen M., Apfel, Franklin & Tsouros, Agis. (2013). Health Literacy. WHO Regional Office for Europe. ISBN: 978 92 890 00154

**Keywords:** Medical libraries, Czech Republic, Health literacy, Web portal MedLike, Professional learning.

### ***A Study of Prison Book Projects in the U.S.***

***Andrea Wyman***

Pennsylvania Western University, Edinboro, U.S.

**Abstract.** Prison book projects exist throughout the United States. Simply put, these volunteer projects collect book donations and ultimately mail books to incarcerated individuals for them to keep. Simplicity, however defies understanding the inner, sometimes complicated workings of these efforts to get reading materials to inmates. This session describes the history of getting books to incarcerated individuals, the types and variety of volunteer organizations providing these services and gives voice to those incarcerated individuals and how they value the importance of the books and prison book projects.



**Keywords:** Books to Inmates, Independent Prison Book Projects in the US, Making Literature Available to Incarcerated Individuals.

## ***A Study on the Perception of Potential Users of the Social Impact of Public Libraries***

***Qiong Tang<sup>1</sup>, Chao Wang<sup>2</sup>, and Jiatong Zhuang<sup>3</sup>***

<sup>1</sup>PhD, Associate professor, Vice Dean of School of Information Management, Sun Yat-sen University. Guangzhou, China

<sup>2</sup>Doctoral student, School of Information Management, Sun Yat-sen University, Guangzhou, China

<sup>3</sup>Postgraduate student, School of Information Management, Sun Yat-sen University. Guangzhou, China

### **Abstract**

**[Purpose/Significance]** In addition to the perspective of users, this paper analyzes the perception of potential users on the social impact of public libraries, and provides references for realizing high quality development and marketing strategy layout of public libraries.

**[Design/Methodology]** On the basis of designing the perceptive framework of social impact of public libraries, select the potential users of Guangzhou public libraries as research samples, investigates the social impact of public libraries from the perspective of potential users through empirical research, discusses the perception differences among potential users with different identity characteristics on the impact of public libraries, and analyzes the reasons why potential users do not use public libraries and their expectations for using public libraries.

**Findings/Conclusion** (1) From the perspective of potential users, public libraries' main social impact is "collect different kinds of information resources" "promote people's reading ability" and "meet the demand of people to borrow information resources for free", but the impact of public libraries on social contact, community or public welfare activities and leisure is relatively insignificant. (2) There are significant differences in the perception of the social impact of public libraries among the potential users with different ages, educational backgrounds and occupations. (3) There are three main reasons for potential users not to use public libraries: the distance to the library, getting the information they need from the Internet, and lack of time. (4) Potential users mainly expect to read in the library, use different kinds of information resources in the library and study or work in the library space, while the proportion of potential users expecting functions related to social contact and leisure is not high.

**[Originality/Value]** This paper provides a new perspective, which is different from the users, to investigate the public's perception of the social

impact of public libraries, and further respond to the national requirements of improving the service efficiency of public libraries and promoting the high-quality development of public libraries.

**Keywords:** Public library, Potential user, Non-user, Impact, Perception.

## ***Studying Discussion Groups and Image Boards - Ethical and Methodological Questions***

***Ari Haasio***

Seinäjäski University of Applied Sciences, Finland

**Abstract.** This study considers the ethical and methodological issues that should be taken into account when conducting research on discussion groups and image boards. The article discusses the research of both the clear web and the dark web and their ethical and methodological special features.

Clear web can be understood as the part of the internet, which can be reached by regular browsers and is not hidden. The dark web on the other hand is the part of the internet, which is reachable by special browsers, like Tor-browser (Gehl, 2018). Google and other search engines cannot find the pages included to the dark web. It is also often used for illegal purposes, because it is anonymous due the technology used.

The main research questions are:

- 1) What ethical questions must be taken into account in research on discussion boards and image boards?
- 2) What kind of methods can be used to analyze the content of these discussions?

The presentation and the data collected is based on the previous research done by the author both in the clear web's and dark web's discussion forums and image boards (see e.g. Haasio, 2015; Haasio & Naka, 2019; Haasio, Harviainen & Savolainen, 2020; Harviainen, Haasio & Hämäläinen, 2020; Harviainen et al., 2021; Hämäläinen, Haasio & Harviainen 2021; Haasio, Harviainen & Hämäläinen, 2022). Previous methodological literature on Internet research has also been utilized in the research (e. g. Kozinets, 2019).

The results show that methodologically, research questions can be approached in many ways, depending on the question formulation. Netnographic analysis (e.g. Kozinets 2019) is a qualitative method that is effective in researching online communities. Method triangulation combining qualitative and quantitative approaches is often recommended. In the analysis of discussion groups, it is very important to consider anonymity, especially when investigating sensitive topics, such as health-

related issues. In the case of the dark web, trust and anonymity are emphasized even more (see Harviainen et al. 2020).

### References:

- Gehl, R. W. (2018). Weaving the dark web: legitimacy on freenet, Tor, and I2P. MIT Press.
- Haasio, A. (2015) Toiseus, tiedontarpeet ja tiedon jakaminen tietoverkon “pienessä maailmassa”: Tutkimus sosiaalisesti vetäytyneiden henkilöiden informaatiokäyttäytymisestä. Dissertation. Tampere University. [Otherness, information needs and information sharing in the “small world” of the Internet: A study of socially withdrawn people’s information behavior].
- Haasio, A., Harviainen, J. T. & Savolainen, R. (2020). Information needs of drug users on a local dark Web marketplace. *Information Processing & Management*, 57(2), 102080.
- Haasio, A., Harviainen, J. T. & Hämäläinen, L. (2022). 'Biodynamically cultivated hash, confidentially': information sharing on the dark web. <http://informationr.net/ir/27-SpIssue/isis22/isis2241.html> In Proceedings of ISIC: the information behaviour conference, Berlin, Germany, 26-29 September, 2022. *Information Research*, 27(Special issue), isic2241. <http://InformationR.net/ir/isis22/isis2241.html> (Archived by the Internet Archive at ...) <https://doi.org/10.47989/irisic2241>
- Haasio, A. & Naka, H. (2019). Information needs of the Finnish and Japanese hikikomori: a comparative study. *Qualitative and Quantitative Methods in Libraries*, 8(4), 509-523.
- Harviainen, J. T. Haasio, A. & Hämäläinen, L. (2020). Drug traders on a local dark web marketplace. In Proceedings of the 23rd International Conference on Academic Mindtrek (pp. 20-26).
- Harviainen, J. T., Haasio, A., Ruokolainen, T., Hassan, L., Siuda, P., & Hamari, J. (2021). Information protection in dark web drug markets research. *Information Protection in Dark Web Drug Markets Research [in:] Proceedings of the 54th Hawaii International Conference on System Sciences, HICSS 2021, Grand Hyatt Kauai, Hawaii, USA, 4-8 January 2021, Maui, Hawaii*, (ed.) Tung X. Bui, Honolulu, HI, s. 4673-4680.
- Hämäläinen, L., Haasio, A. & Harviainen, J. T. (2021). Usernames on a Finnish Online Marketplace for Illegal Drugs. *Names*, 69(3).
- Kozinets, R. V. (2019). *Netnography: The essential guide to qualitative social media research*. Sage.

**Keywords:** Internet, Ethics, Methodology, Dark web, Clear web.

## ***Sultan Qaboos University Students' Ethical Competencies During e-Learning: A Case Study on the Information Studies Department***

***Ahmed Shehata, Mustafa Ali Khalaf, Khalfan Al-Haji, El Sayed El  
Sawy,  
and gr Eldin Osman***

Sultan Qaboos University, Muscat, Oman

**Abstract.** The COVID-19 pandemic has forced educational institutions to shift to the e-learning style, which did put students under pressure to learn skills and competencies that target the e-learning environment. A vital competency in e-learning is ethical competency. Ethical competencies affect the educational process as students need to follow the university's

code of ethics to ensure equality in the assessment process. Our study focuses on the students enrolled in the Information Studies Department at Sultan Qaboos University during the COVID-19 pandemic in an attempt to identify their e-learning practices and ethical competencies. A quantitative approach was adopted using a questionnaire as a research tool. The results indicated a lack of essential ethical competencies among the study sample, negatively affecting the education process. Insufficient awareness of ethical practices in e-learning was detected. Students were found to lack knowledge on learning misconducts. A program to educate students on ethical practices is required at all educational levels to ensure the quality of the learning process.

This research's results are believed to help understand the current practices in e-learning, shed light on the importance of ethical competencies, and provide students guide the students to acquiring required ethical digital competencies.

**Keywords:** Ethical competency, e-learning, Information Studies, COVID-19.

### ***Survey of LGBTQ-Related Book Holdings at the Gender Resource Centre***

***Kazuyuki Sunaga***

Kokugakuin University, Tokyo, Japan

**Abstract.** In recent years, interest in sexual minorities, the so-called LGBTQ people, has increased in Japan. Same-sex marriage is not accepted at the national level, but the same-sex partnership system, which was introduced in Tokyo's Setagaya Ward and Shibuya Ward in 2015, has expanded to 100 local governments as of April 1, 2021. The existence of LGBTQ people has been recognized in Japan, but there are few facilities where LGBTQ people can obtain information of interest.

Materials related to LGBTQ are provided to citizens in public libraries, but there are quite a few such materials in the library of the Gender Equality Center of local governments.

Therefore, in this research, we will investigate whether materials related to LGBTQ are held in the materials room of the Center for Gender Equality in Tokyo.

Analyze the number of collections using classification symbols related to homosexuality, bisexuality, and transgender in the Japanese decimal classification system used in Japanese libraries.

## ***Sustaining Online Training Development: Implications for a Capacity Building for Center for Learning Resources (CLR-RSU) Librarians***

***Anna Lorriza D. Sajona***

De La Salle-College of Saint Benilde, Readers' Services Librarian, Manila

**Abstract.** The Association of College and Research Libraries (ACRL) highlighted that an information-literate individual can recognize when information is needed and can locate, evaluate, and use the needed information (ACRL, 2001). With the influx of electronic resources and digital services supplied by academic libraries today, teaching librarians must be highly experienced, advanced, and competent in order to fulfill their teaching responsibilities. The current disruptions in providing instructions reshaped the needed and expected competencies for teaching librarians for them to thrive in the present and future demands of educating 21st-century learners. "Librarians require new skills to work effectively in this digital environment and to meet the challenges of digital librarianship." (Khan, S. 2016). As a result of the shift to a digital environment, it is crucial that librarians develop their ability to adapt to change and meet the information needs of students. Quantitative analysis was used to determine the level of agreement between librarians' competency in providing training sessions.

The study aims to examine the CLR RS Librarians' current training program to its stakeholders to analyze their competencies suited to online training delivery. Having transitioned into this digital setting, it is very important that librarians sustain their teaching capacity to be more efficient and effective in providing the right access and use of information resources among stakeholders.

The findings revealed that librarians demonstrated competencies with regard to the specific topic/s being discussed. Likewise, respondents strongly agreed that librarians have sufficient and relevant knowledge specifically of the training contents. The findings also confirmed that librarians' training management, facilitation, and online delivery need to be improved to sustain the effectiveness of the training program.

**Keywords:** Online Training, Academic Libraries, Training Program, Capacity Building.

## ***Synergistic Collaboration to Combat Neglected Diseases***

***Irena Bond, Chase Smith, Carolyn Friel***

Massachusetts College of Pharmacy and Health Sciences (MCPHS), Massachusetts, U.S.

### **Abstract**

#### **Introduction**

Neglected disease drug discovery is poorly funded compared with major diseases new safer therapeutics have not emerged. There is an increasing focus on collaboration and drug discovery efforts such as public–private partnerships. A major obstacle for the creation of these relationships is the issue of intellectual property. This paper describes the creation of an innovative Medicinal Chemistry Cheminformatics Track for pharmacy students. The partners include an academic institution (MCPHS University), a non-profit research organization focused on developing new treatments for neglected patients (DNDi) and a drug discovery company that provides free software in support of educational collaborations (Optibrium).

The goals of the project are 1) increase training in pharma-relevant informatics through industry/academic partnerships 2) apply data management skills to curate analyze and use a cheminformatics database and 3) synthesize new chemical compounds aimed at treating neglected diseases.

#### **Description**

To meet the goals of the program a librarian and two medicinal chemists designed a three-course cheminformatics track. Students completed 1) a cheminformatics course with a focus on using open source chemistry databases and in silico drug design, 2) a Neglected Disease Medicinal Chemistry Research course focused on American Trypanosomiasis and Leishmaniasis and 3) an advanced drug discovery elective where students synthesized novel compounds that were assayed for bioactivity by the DNDi. The objectives were to instruct students how to use PubChem, MMDB, ChemDraw, SciFinder, as well as chemistry open data sets. They also learn the fundamentals of the StarDrop™ software to analyze the data set and make data-driven predictions through probabilistic modeling and statistical inference. Novel drug-like structures were identified, synthesized, tested, and placed on open source chemical/biological data sharing platforms.

The project was evaluated using 1) curricular track development and approval; 2) student completion of the track and 3) number of novel compounds synthesized and dissemination of results.

## Results

The goals of the project were met. The track was developed and has successfully been implemented for the past two years. Thirteen students enrolled in the track and eleven students completed it thus far. Students were able to use data provided by the DNDi with software provided Optibrium to design 26 novel compounds. Twenty two compounds have been assayed by the DNDi for potency. Five of the compounds are highly active and are being further explored by the DNDi. The new compounds are shared internationally via an open source Electronic Laboratory Notebook (ELN) with no patent restrictions This collaborative project increased the pipeline of compounds available to treat diseases of medically underserved populations

## Conclusion

Synergistic collaborations between academic institutions and public and private research organizations can be utilized to drive innovation and make a difference. A cheminformatic curricular track was developed and had success only through the synergy of the three partners. Librarians can play an important role in promoting open source resources for research and can effectively collaborate with cross-functional partners. The successful first two years of the track led to improved cheminformatics skills of the students and to the synthesis of novel compounds to treat neglected diseases.

## References:

- Ekins, S., Spektor, A., Clark, A., Dole, K., Buinn, B. (2017). Collaborative Drug Discovery for More Medicines for Tuberculosis (MM4TB). *Drug Discovery Today*, 22 (3), 555-565.
- Rose, D., Marshal, R., Surber, M. (2015). Pharmaceutical Industry, Academia and Patient Advocacy Organizations: What is the Recipe for Synergic (win-win-win) collaborations? *Respirology*, 20, 185-191.
- Ferrins, L., & Pollastri, M. P. (2018). The Importance of Collaboration between Industry, Academics, and Nonprofits in Tropical Disease Drug Discovery. *ACS infectious diseases*, 4(4), 445–448. <https://doi.org/10.1021/acsinfecdis.7b00208>

**Keywords:** Collaboration, Drug discovery, Open source, Neglected diseases, Cheminformatics, Pharmacy students.

## *Towards Expanding the Typology of Research Methods in Library and Information Science Research*

**Krystyna K. Matusiak<sup>1</sup>, Veslava Osinska<sup>2</sup>, Peter Organisciak<sup>3</sup>, and  
Robyn Thomas Pitts<sup>4</sup>**

<sup>1</sup>Associate Professor, Research Methods and Information Science Department,  
University of Denver, USA

<sup>2</sup>Associate Professor, Institute of Information and Communication Research, Nicolas  
Copernicus University (NCU), Torun, Poland

<sup>3</sup>Assistant Professor, Research Methods and Information Science Department,  
University of Denver, USA

<sup>4</sup>Assistant Professor, Research Methods and Information Science Department University of Denver, USA

## **Abstract**

### **Introduction**

Systematic investigation of research methods in library and information science (LIS) is fundamental to understanding the field's evolution and contributes to the discussion about the diversity of research methods. Three major approaches to studying research methods have emerged: content analysis (Järvelin & Vakkari, 1990), bibliometrics (Hou et al. 2018), and more recently data mining (Zhang et al., 2021). The classification developed by Järvelin & Vakkari (1990) has served as a foundation for the systematic content analysis of research methods in LIS for many years and has been adopted in several studies (Chu, 2015; Järvelin & Vakkari, 2021; Ma & Lund, 2021; Tuomaala et al., 2014). While the use of a consistent classification model has been very useful in longitudinal studies, this model has limitations for new analyses, as it does not reflect the increase and variety of qualitative and mixed methods research strategies.

### **Objective**

The purpose of this study was to investigate the relationship between the use of visual data, information visualization, and research methods applied in information science studies. This study conducted a content analysis of research articles published in the Journal of the Association for Information Science and Technology (JASIST) between 2015 and 2019. It also aimed to provide an updated research methods typology in order to study the relationship between visual data representation and research approaches.

### **Methods**

This study used a combination of content analysis and machine learning methods to examine the relationship between visual data representation and research methods. In the content analysis of empirical studies, it adopted research methods typology from social sciences with a distinction between 1.) qualitative, quantitative, and mixed methods approaches, 2.) research strategies, and 3.) data collection techniques (Crotty, 1998; Creswell & Creswell, 2017). The pool of analyzed articles included 751 research papers published in JASIST. The coding scheme consisted of 34 variables, with 19 focusing on empirical research methods.

### **Results**

This study removes ambiguities in the terminology and provides a clear distinction between research approaches, strategies, and data collection techniques. The typology adopts a hierarchical structure used in social science research: Type of Investigation > Approach > Research Strategies > Collection Methods.



The resulting typology makes a distinction between theoretical and empirical types of investigations and further distinguishes between empirical studies that used primary and secondary data. Empirical studies can be designed within qualitative, quantitative, or mixed methods approaches. Research approach is defined as an overall plan or design for conducting research, not just a method of data analysis (Creswell & Creswell, 2017). Research strategies are types of qualitative, quantitative, or mixed-method approaches that provide a specific direction for research design and the selection of methods in data collection and analysis. Surveys and experiments are common strategies within the quantitative approach. The proposed scheme also includes quantitative research strategies that are unique in LIS such as bibliometrics or adopted from computer science such as data mining. Examples of strategies within the qualitative approach include ethnographic research, case study, or grounded theory.

Collection methods represent tools and techniques related to collecting data in empirical studies. This study identified a range of techniques used in empirical studies, such as questionnaires, interviews, data extraction, observations, and focused groups. The proposed typology allows one to study of the relationships between the categories and supports quality control in content analysis in examining the match between research approaches, strategies, and data collection techniques.

### **Conclusion**

The growth in empirical research in LIS, the emergence of new research strategies and data collection techniques, and the influx of big data in multiple formats call for revisiting and expanding the typology of research methods used in LIS empirical studies. The proposed scheme expands the range of research strategies within the quantitative and qualitative approaches and opens an opportunity for a refined classification and further diversification of research methods in LIS.

### **References:**

- Chu, H. (2015). Research methods in library and information science: A content analysis. *Library & Information Science Research*, 37(1), 36-41
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage.
- Crotty, M. J. (1998). *The foundations of social research: Meaning and perspective in the research process*. Sage.
- Hou, J., Yang, X., & Chen, C. (2018). Emerging trends and new developments in information science: A document co-citation analysis (2009–2016). *Scientometrics*, 115(2), 869-892.
- Järvelin, K., & Vakkari, P. (1990). Content analysis of research articles in library and information science. *Library & Information Science Research*, 12(4), 395-421.
- Järvelin, K., & Vakkari, P. (2021). LIS research across 50 years: Content analysis of journal articles. *Journal of Documentation*, 78(7), 65-88.
- Ma, J., & Lund, B. (2021). The evolution and shift of research topics and methods in library and information science. *Journal of the Association for Information Science and Technology*, 72(8), 1059-1074.

Tuomaala, O., Järvelin, K., & Vakkari, P. (2014). Evolution of library and information science, 1965-2005: Content analysis of journal articles. *Journal of the Association for Information Science & Technology*, 65, 1446-1462.

Zhang, Z., Tam, W., & Cox, A. (2021). Towards automated analysis of research methods in library and information science. *Quantitative Science Studies*, 2(2), 698-732.

**Keywords:** research methods typology, content analysis, research approaches, research strategies, data collection techniques.

## ***True vs. Truth in the Sciences***

***Chris Wiley***

University of Illinois Urbana-Champaign

**Abstract.** Data and information are currency and the core of our processes and practices within information science and daily life. Data is information that can be sensed but not yet consciously understood or has not yet been rationally organized.<sup>1</sup> People at all levels of society have access to data through social networks, mobile devices, and various sensors. However, the consistency of its availability and access does not mean all of it represents accuracy or truth. For example, when there is too much information on a given subject without strong oversight over what is verifiable and what is false? <sup>2</sup> Fake news is defined as information that is false or misleading information. <sup>3</sup>. There is a difference between information that is true and information that is truth? As well as the importance of examining the relationship of both terms in science. This paper uses textual analysis to explore these concepts in relationship to news stories. Overall, the goal of this paper is to use the results as framework to teach students the differences between true and truth. As well as how this can be used within research practices.

### **References:**

1. Bates, M.J. (2005). Information and knowledge: An evolutionary framework for information science. *Information Research*, 10(4)

2. Donovan, S. (2021). Shhhh... Combating the Cacophony of Content with Librarians. *Global Insights*

Fake News : <https://www.cits.ucsb.edu/fake-news/what-is-fake-news>

## ***Unearthing the Cartographic Treasures of National Technical University of Athens (NTUA)***

***Anastasia Giamali<sup>1</sup>, Stavroula Kouri<sup>2</sup>***

<sup>1</sup>Librarian, Head of NTUA Historical Library, Athens, Greece

<sup>2</sup>Librarian, NTUA Library & Information Center Director, Athens, Greece

**Abstract.** The presentation focuses on highlighting the cartographic material included in the collections of the NTUA Library and Information

Center, the NTUA School of Rural, Surveying and Geoinformatics Engineering and the NTUA School of Mining and Metallurgical Engineering. These are treasures in the conventional sense of the word, as they include some of the oldest, rarest and most exceptional maps of the NTUA Library and the NTUA School of Rural, Surveying and Geoinformatics Engineering, but there are also "common" maps that are considered treasures because they capture the spirit of their time, illuminating the geographical and not exclusively view, of the people who made and used them. Particularly, it is cartographic material of all kinds, since this article presents geological maps of various regions of Greece, seismotectonic maps with seismological data, soil and geological maps from the Institute of Geological and Mining Research, which are included in the collections of the NTUA School of Mining and Metallurgical Engineering. Digital maps concerning businesses and population data of the Attica region, are also presented.

In the context of highlighting material of geographical and cartographic value, today the NTUA Library and Information Center has started the record keeping and digitization planning of these important thematic collections, with the intention of the process proceeding to the recording and, by extension, the digitization of the cartographic material of all NTUA Schools thus allowing, through the correct documentation of cartographic collections, their accessibility to researchers, in order to have continuous value for the scientific community.

**Keywords:** Cartographic material, Seismotectonic maps, Geological Maps, NTUA Library and Information Center, Cartographic treasures.

***The University Library Exhibition as Research  
Communication: Reflections on the Design of Visual  
Representations of Statistics and Differing Disciplinary Time  
Perspectives***

***Mikael Reberg***

Mid Sweden University Library, Sweden

**Abstract.** The aim of this paper is to reflect on how university library exhibitions can contribute to research communication by presenting research findings and scientific methodologies in an experiential way.

The paper builds on reflections from a project at Mid Sweden university library during 2020–2022 where library staff collaborated with researchers in producing an exhibition on the theme of forests and sustainable development. The paper discusses how visual elements based on statistical information together with differing disciplinary perspectives of time was

designed and organised as part of the exhibition. During the design and re-design of the exhibition, the results were continually evaluated by applying methods such as participatory observations and reflexive critique.

The context for research-based exhibitions is research communication, which is an important part of democratic society. The need to share scientific knowledge and new findings with the public as well as with organisations and institutions is key to innovation, sustainable development, citizens' intellectual growth and to the general progress of a vital deliberative democracy. Research communication deals not only with spreading (popularised) research findings from researchers to non-researchers, but also with the dissemination of knowledge about the research process itself. Research communication can even function as an arena for public participation in research projects and provide legitimacy for researchers.

The university library is well suited to support these ambitions. Research communication in the form of exhibitions at the university library has the potential to engage students and other library visitors through multimodal experiences. By combining and designing different modes of communication such as images, texts, artefacts, sound and interactive elements in a spatial arrangement, the library can work together with the researchers, assisting them in presenting research to visitors in a new experiential way. Here, e.g., complex statistical data can be redesigned to be understood “at a glance” and be presented as part of a wider exhibition narrative.

**Keywords:** Research communication, Visual communication, Visual design, Exhibition, Exhibition design, Statistical information, Library exhibition.

### ***University Library Services in the Time of Covid-19: Understanding their Value***

***Elena Gómez-Cruz, Victor Harari-Betancourt, and Genoveva Vergara-Mendoza***

Universidad Iberoamericana Ciudad de México

**Abstract.** University libraries contribute to the fulfillment of the mission of the institutions to which they belong. Its users, who are often required to use the library as part of their academic program, physically go to the libraries to consult the resources and to use the facilities. During the health contingency period caused by the Covid-19 pandemic, we verified that information consultation services continue despite the library facilities being closed. The university community that does not use the library does

not do so, not because it does not require information, but because it satisfies this need in another way, since we all consume information daily, in various formats, and through different channels. So, what is the value of the library service? Is it possible to measure it? If so, how is it measured? Does the value of the service have to do with the impact that the library has on the performance of students and academics?

In the structural equations model developed to measure the quality of the resources and services, as well as the users' satisfaction in the Francisco Xavier Clavigero library of the Universidad Iberoamericana Ciudad de México, the latent variable value of the service was modeled through three manifest variables. The surveys carried out in this institution in 2017, 2019, and 2022 account for the validity and reliability of the construct. Furthermore, using the variance estimation method of the structural equations model, carried out with the EQS version 6.1 program, it is possible to numerically measure, on a five-point scale, the average evaluation that users give to the value of the service of this library and determines whether the manifest variables proposed to measure the value of the service are statistically significant..

## ***Using FDB Model to Classify Greek Scientific Medical Articles***

***Evangelia Petraki***

National and Kapodistrian University of Athens, Department of Economics, Athens, Greece

**Abstract.** The purpose of the current paper it is to investigate how the FDB model and its algorithms can be used as a tool to automatically correlate Greek scientific medical articles with the appropriate terms derived from a controlled vocabulary thesaurus, like the ICD-10 codes. FDB (Framework Database) is a set theoretic model that supports the administration of any multilingual database and thesaurus both at data and interface level through a universal schema while at the same time provides algorithms to automatically correlate data with appropriate thesaurus terms. For the current research, Greek scientific articles coming from the Archives of Hellenic Medicine were used to create an FDB database and ICD-10 codes in Greek and English were used as an FDB multilingual thesaurus. This paper describes the steps followed for converting the Greek medical articles to text files, the annotation needed to be done for each article, the metadata defined in FDB in order to host the most important parts of each

article, the correlation procedure, the results obtained from using 56 articles as an example and the topics for future work.

**Keywords:** FDB, ICD-10 codes, automatic indexing, Greek Medical Articles.

## ***Using Phenomenography to Measure the First-year Student Experience of Using the Online Library***

***Breda Connell***

South East Technological University, Carlow, Ireland

**Abstract.** Higher Education libraries put a lot of resources into their online library provision for students. Library staff spend a great deal of time designing supports and training for students in using these resources. Despite this, little is known about student experiences of using online library resources as most research in the Library Information Science field centres on student behaviours (Bruce et al, 2014). This study aimed to gather data, using a mixed methods approach involving a quantitative survey and phenomenographic analysis of interview transcripts, of first year student experiences of using the online library at South East Technological University, Carlow (formerly Institute of Technology Carlow, Ireland). The primary objective with this research was to provide evidence of the experiences of students in their interactions with the online resources, in order to optimally design these resources to maximise student learning and to provide focused and targeted supports to students as they learn to use the online library. Triangulating the data using these two differing approaches strengthened the study by having the first phase inform the design of the second phase (Morrison et al., 2011). Studying the experiences of students in their use of the online library through quantitative and qualitative methods captured much of the complexity and the richness of human interaction in a way that a single method design could not.

Phenomenography, developed as a research method in education “to identify and differentiate experiences” (Maybee, 2015) and specifically to look at the qualitative differences or variation between individuals as they learn (Marton & Booth, 1997). The phenomenographic approach is a methodology which was designed to research the process of learning from the student’s perspective (Marton, 1988). This study highlights the qualitatively different ways that students ‘experience, conceptualise, perceive and understand’ (Marton, 1986) using the online library resources. Capturing this variation in experience has helped to inform library policy and practice and create a focused learning experience for first

year students. This research is placed in the context of student transition to Higher Education learning and specifically for this cohort of first year students the context of learning online during the COVID-19 pandemic restrictions is considered. Findings show that students experience the online library resources in a variety of ways depending on how they are progressing as autonomous learners, where they are with developing their identity as a student and their level of engagement with their learning. The range of experiences show that students consider the library to be a vast resource, that searching the online library and learning to navigate it takes time as does evaluating search results. It was also learned that students recognise that competencies and strategies are crucial for success and finally, that students feel that learning how to use the online resources should be possible in a variety of ways at various times during the year.

### **References:**

- Bruce, C., Davis, K., Hughes, H., Partridge, H. and Stoodley, I. eds., (2014). Information Experience: Approaches to theory and practice, UK: Emerald.
- Marton, F. and Booth, S., (1997). Learning and awareness, New Jersey: Lawrence Earlbaum Association.
- Marton, F., (1986). 'Phenomenography: A research approach to investigating different understandings of reality', Journal of Thought, 21(3), 28 - 49.
- Marton, F., (1988). 'Phenomenography: a research approach to investigating different understandings of reality' in Sherman, R. R. and Webb, R. B., eds., Qualitative research in education: focus and methods, London: Routledge Farmer, 141 - 161.
- Maybee, C., (2015). Informed Learning in the undergraduate classroom: The role of information experiences in shaping outcomes, unpublished thesis (Doctor of Philosophy), Queensland University of Technology, available: [https://eprints.qut.edu.au/view/person/Maybee,\\_Clarence.html](https://eprints.qut.edu.au/view/person/Maybee,_Clarence.html)
- Morrison, K., Mannion, L. and Cohen, L., (2011). Research methods in education, 7th ed., London: Routledge.

**Keywords:** Online library, Phenomenography, Mixed methods research, Informed Learning, Information Literacy, Higher Education.

## ***Utilisation of Mobile Phones for Health Information Seeking by Women in Rural Busoga Sub-region, Eastern Uganda***

***Irene Mbawaki, Constant Okello-Obura, and Sarah Kaddu***

Makerere University, Uganda

**Abstract.** The study explores the use of mobile phones for health information seeking by women in rural areas. Specifically, understanding their experiences and perceptions towards the use of mobile phones in order to devise means of improving access to health information in rural areas. The study will also lead to understanding of the information-seeking behaviour of women in rural areas in light of the ubiquity of mobile phones. As part of a PhD study, this current paper discusses two aspects of the findings: the sources of health information and the barriers to accessing

health information via mobile phones for women in rural areas of the Busoga region in eastern Uganda.

Qualitative research was conducted particularly through in-depth interviews and focus group discussions with women and health workers. Preliminary findings show that women in rural areas have limited access to health information, with health workers and their mothers serving as their primary sources of health information. Airtime, poor network coverage, unreliable power supply, and poverty are all barriers to using mobile phones to seek health information. The paper concludes by offering recommendations for how to improve the situation so that women can easily access health information whenever they need it.

### ***Virtual Interviews vs. in Person Interviews: Factors Influencing Library Researchers' Methodological Decisions***

***Lauren H. Mandel***

University of Rhode Island, Graduate School of Library and Information Studies, Kingston, U.S.

**Abstract.** Due to the Covid-19 restrictions on travel, as well as the closures of many libraries, this researcher had to pivot a planned in-person experimental research project to a completely different project during the Covid-19 pandemic. The new project, researching library use of GIS, was chosen because it could be completed following Covid-19 safety protocols through the use of interviews with library practitioners conducted via Zoom. This experience led the researcher to wonder about the use of virtual interviews versus in person interviews as a research method prior to 2020, during 2020-early 2021 (the time of lockdowns), and currently (late 2021-2022). The primary research question was what factors are influencing researchers' selection of virtual interviews instead of in person interviews? To investigate that question, the researcher began by undertaking a literature review for the prior decade (2013-2022).

There are 31 papers in the Library, Information Science & Technology Abstracts (LISTA) database from EBSCO with subject=interview\* and subject=librar\*, from 2013 to 2022, in English, that also include the following words anywhere in their text: Zoom (n=16), WebEx (n=1), and Skype (n=14). Many of the articles were about something other than using these tools to facilitate virtual interviews; these were discarded from the sample. Only 13 papers reported use of videoconferencing software for virtual interviews from 2013-2022: six using Zoom (Ellern & Cruz, 2021; Lund et al., 2021; Marshall, 2022; Miller & Janke, 2022; Stvilia, 2021 et al.; Trujillo & Tallman, 2021) and seven using Skype (East et al., 2016;



Emanuel, 2013; Luo, 2014; Poole, 2017; Shen, 2019; Yeh & Walter, 2016; Zvyagintseva, 2018).

There was no reported overlap between the videoconferencing platforms as an interview tool: Skype was reported 2013-2019 and Zoom was reported 2021-2022. Since all the Skype interviews occurred prior to 2019, they were prior to Covid-19. Two sets of Zoom interviews were conducted before Covid-19 lockdowns (Lund et al., 2021; Stvilia et al., 2021), one was conducted during the Covid-19 lockdowns (Miller & Janke, 2022), another was conducted in 2020 although the author did not mention lockdowns (Marshall, 2022), and two papers did not mention the timing of their Zoom interviews (Ellern & Cruz, 2021; Trujillo & Tallman, 2021).

None of the papers that reported using Skype gave a specific reason for the selection of virtual interviews or Skype, specifically, but they all interviewed geographically dispersed participants. All the papers that reported using Zoom also interviewed people from a wide geographic region or across countries. Most of these papers gave no specific reason for using Zoom (Ellern & Cruz, 2021; Marshall, 2022; Stvilia et al., 2021; Trujillo & Tallman, 2021). One gave no specific reason but did discuss the impact of lockdowns on travel limitations, possibly hinting at this as a reason for the use of Zoom for the interviews (Miller & Janke, 2022). One paper in the entire sample gave a reason for using videoconferencing software for interviews: using Zoom to facilitate recording and transcription (Lund et al., 2021).

A literature review only allows a researcher to read what other researchers have decided to report. It does not allow any further investigation into the details of each researcher's methodology, the reasoning behind the selection of those methodological choices, or any other factor influencing methodological decisions other than what is reported in publications. Therefore, this researcher is undertaking a brief survey of the authors of the 13 papers that reported use of videoconferencing software for virtual interviews from 2013-2022. The survey will be conducted in Spring 2023. Results of that survey will be reported at the conference to elucidate the factors that are influencing researchers' selection of virtual interviews instead of in person interviews.

### **References:**

- East, M. L., Havard, B., and Hastings, N. B., (2016). Mental Health Mobile Apps' Instruction: Technology Adoption Theories Applied in a Mixed Methods Study of Counseling Faculty. *Journal of Technology in Human Services*, Vol. 34, No. 4, 301 – 325.  
<https://doi.org/10.1080/15228835.2016.1233842>
- Ellern, G. D., and Cruz, L., (2021). Black, White, and Grey: The Wicked Problem of Virtual Reality in Libraries. *Information Technology & Libraries*, Vol. 40, No. 4, 1 – 18.  
<https://doi.org/10.6017/ital.v40i4.12915>
- Emanuel, J. (2013). Digital Native Librarians, Technology Skills, and Their Relationship with Technology. *Information Technology & Libraries*, Vol. 32, No. 3, 20 – 33.

- Lund, B. D., Widdersheim, M., Fay, B., and Wang, T., (2021). Training and Practice of Instructional Librarians: Cross-Population and Longitudinal Perspectives. *Reference Librarian*, Vol. 62, No. 2, 126 – 143. <https://doi.org/10.1080/02763877.2021.1944450>
- Luo, L., (2014). Slam the Boards: Librarians' Outreach into Social Q&A Sites. *Internet Reference Services Quarterly*, Vol. 19, No. 1, 33 – 47. <https://doi.org/10.1080/10875301.2014.902782>
- Marshall, C., (2022). Measuring Hospital Libraries Impact on Patient and Hospital Outcomes. *Journal of Hospital Librarianship*, Vol. 22, No. 3, 171 – 178. <https://doi.org/10.1080/15323269.2022.2088200>
- Miller, K., and Janke, R., (2022). Canadian Academic Nursing Librarians: Impacts of the COVID-19 Pandemic on Librarianship Practice. *Journal of the Canadian Health Libraries Association (JCHLA)*, Vol. 43, No. 2, 47 – 57. <https://www.doi.org/10.29173/jchla29596>
- Poole, A. H., (2017). 'A Greatly Unexplored Area': Digital Curation and Innovation in Digital Humanities. *Journal of the Association for Information Science & Technology*, Vol. 68, No. 7, 1772 – 1781. <https://doi.org/10.1002/asi.23743>
- Shen, Y., (2019). Create Synergies and Inspire Collaborations Around the Development of Intelligent Infrastructure for Human-Centered Communities. *Journal of the Association for Information Science & Technology*, Vol. 70, No. 6, 596 – 606. <https://doi.org/10.1002/asi.24150>
- Stvilia, B., Lee, D. J., and Han, N., (2021). "Striking out on Your Own"--A study of Research Information Management Problems on University Campuses. *Journal of the Association for Information Science & Technology*, Vol. 72, No. 8, 963 – 978. <https://doi.org/10.1002/asi.24464>
- Trujillo, N., and Tallman, K. W., (2021). "A library Within a Library": Organizational Design as Perceived by Academic Government Information Librarians. *Journal of Library Administration*, Vol. 61, No. 1, 21 – 41. <https://doi.org/10.1080/01930826.2020.1845545>
- Yeh, S.-T., and Walter, Z., (2016). Critical Success Factors for Integrated Library System Implementation in Academic Libraries: A Qualitative Study. *Information Technology & Libraries*, Vol. 35, No. 3, 27 – 42. <https://doi.org/10.6017/ital.v35i3.9255>
- Zvyagintseva, L., (2018). It Is Our Flagship: Surveying the Landscape of Digital Interactive Displays in Learning Environments. *Information Technology & Libraries*, Vol. 37, No. 2, 50 – 77. <https://doi.org/10.6017/ital.v37i2.9987>

**Keywords:** Interview method, Libraries, Virtual interviews, Videoconferencing.

## ***The Web-based Application for Collecting Data and Statistics of Library Events (BelPrIz)***

***Marijan Špoljar MA<sup>1</sup> and Erika Žitko<sup>2</sup>***

<sup>1</sup>Library Analyst, Ljubljana City Library

<sup>2</sup>Library Network Administrator, Ljubljana City Library

**Abstract.** Event and educational activities significantly complement the services of public libraries in Slovenia and other countries. Libraries provide free access to a wide range of cultural and educational contents and at the same time remind the society of the importance of the library's cultural and educational role in modern urban culture. The IFLA Public Library Service Guidelines state that the public library must provide access to knowledge, information, lifelong learning and the arts through various

resources and services that are accessible to all residents of the local community. The role of the public library is to promote the cultural and artistic development of the local community and contribute to the cultural recognition of the local environment. The program of events must be designed in such way that the library fulfils various library roles, promotes its library collection and services, and thus proactively fulfils a cultural, informational, educational and social role in its local environment, while having a library cooperation policy with partners.

Every year, the librarians in Ljubljana City Library (LCL) organize around 3,500 events for different groups of users (meetings of reading groups, storytelling hours, book presentations, lectures, performances, workshops, courses, etc.). They plan, collect and report on all the events to founders and the professional public, and regularly promote them. An extensive data collection about all events can only be properly managed and stored with suitable tools that enable a routine data collecting process, reduce errors and enable a uniform overview and comparison of data over the years. For this purpose, the librarians and IT professionals in the LCL developed a Web-based Application for Collecting Data and Statistics of Library Events, named BelPrIz, which enables to plan content and finances and the review of all events.

The presentation will discuss the methodology, planning and implementation of the Web-based Application for Collecting Data and Statistics of Library Events (BelPrIz) in the LCL network, which is with 35 branch libraries and 47 mobile library stops the largest library organization in Slovenia and the most networked cultural institution in the City of Ljubljana. Web-based application, which can be accessed with user and/or administration rights at anytime from anywhere, connects the user interface and the database, which collects data on all events (title, description, date, location, duration, age group, target group, content, information about performers, promotional material, financial plan) and the administration interface where the data is collected and analysed. The web-based application was tested in a live environment throughout 2022 and upgraded to the extent that today it is the only representative way of collecting all data about events in the LCL. The application could serve various libraries for systematic and consistent data collection and a quick overview of the results, which can help libraries in planning their activities.

**Keywords:** public libraries, events, educational activities, collecting data, BelPrIz.

## ***Where are the Librarians in the Academic Library? Comparing Organizational Charts from Higher Education Institutions in the US***

***Monica Carroll and Elizabeth Marathas***

University of Illinois, Urbana-Champaign, U.S.

**Abstract.** Modern academic libraries seek to comprehensibly organize and present a universe of information to students and researchers. Almost two-thirds of American adults over the age of 24 have attended at least some college and had access to the information literacy instruction that an academic library provides. There is a significant variation in US higher education institutions, however. A quarter of annual college enrollment is in community colleges. Another two-quarters of students are enrolled in colleges and universities without high research activity. Nevertheless, studies of how academic libraries are organized and managed often focus on R1 or very high research activity universities. This study examines the organizational charts of a small but broad subset of libraries at accredited American institutions of higher education to survey how academic libraries divide their roles and what roles librarians serve within them. A sample of 100 institutions was selected from a population of almost 4000 to represent community colleges, liberal arts schools, Master's colleges and universities, and R1 universities from across the United States. The organizational charts were collected from library websites or personal solicitation and converted into network data. Annual federal survey responses were also collected. Text, numeric, and network analysis will be used to explore the division of library labor and the position of librarians within that structure. The outcome will speak to how academic libraries are actually structured to meet students' and researchers' information literacy needs.

## ***Working in the Open: Using Open Pedagogy to Enhance Student Learning in a Global Information Literacy Course***

***Hilary Bussell<sup>1</sup> and Amanda Larson<sup>2</sup>***

<sup>1</sup>Associate Professor and Head, Humanities and Social Sciences Librarians, Ohio State University Libraries

<sup>2</sup>Affordable Learning Instruction Consultant, Ohio State University Libraries

**Abstract.** Looking for ways to engage students in the classroom around information literacy topics? Open pedagogy might be the solution you need! This presentation will describe how two librarians transformed International Studies 4850: Understanding the Global Information Society

at The Ohio State University by creating a scaffolded open pedagogy experience for students to build transferable skills while using information literacy concepts to explore how information is produced, disseminated, and interpreted across the world. We will share how we collaborated on the project, what stakeholders were invited to participate in the delivery of the course, and how we selected open pedagogy tools and strategies to enhance student learning. The result was a scaffolded course that used open pedagogy to help students engage with various themes relating to global information issues. Students used the web-authoring platform Pressbooks to create multimedia content that explored topics such as global news media, censorship, misinformation, and digital divides. Building on a class unit on copyright and open access, students had the choice either to openly license their work, share it publicly while retaining their copyright, or hide it from public view. In addition, students used the web annotation tool Hypothes.is to complete social annotation reading assignments throughout the course. This activity helped foster in-class discussion and provided students who normally did not speak up in class a space to express their thoughts more freely. We will share our experience revising and teaching this credit-bearing course using open pedagogy, our reflections on what worked and what did not, and how we will iterate on the course in the future. We also provide guidance to help librarians get started using open pedagogy to teach information literacy in other contexts including one-shot sessions and workshops.

## ***POSTERS***

### ***An attempt to adjust Dewey to local (and national) needs: AGLIS Dewey Committee: operation and action plan***

***Panagiota Dedetzi***

Librarian, Msc, Head of Aikaterini Laskaridis Foundation Lending Library

**Abstract.** The presentation focuses on the action and operation plan of the Association of Greek Librarians and Information Scientists (AGLIS) Dewey Committee. The Dewey Committee (DC) was established following an invitation from the AGLIS Administrative Board, on January 17, 2021. Particularly, it is a voluntary working group, which consists of professional librarians, information scientists, experts in cognitive fields and employees in Greek libraries.

This article presents the basic objectives, actions and programming plans of the AGLIS Dewey Committee. Specifically, the main purpose of the Dewey Committee is to serve and provide support to the Greek collections classified with the DDC system. Especially, the Committee focuses its efforts on rendering, improving, adapting, modifying and translating the Dewey Decimal Classification (DDC) for the thematic fields concerning Greece, which are the Greek literature, Greek history - geography and Orthodox Christianity.

Additionally, the Committee's activities include identifying and filling DDC taxonomic gaps in Greek subjects by developing and modernizing the Greek Dewey classifying manuals of AGLIS, those of Greek History and Greek Literature respectively, which are widely used in Greek collections, and by promoting the produced classifying project to the Dewey Web interface, which is used by the global library community. In order to achieve the above, three separate working groups have been set up in the AGLIS Dewey Committee.

The supreme goal of the modernization of AGLIS manuals of Greek Literature and Greek History is to build a modern online classification tool, dynamically enrichable by the Greek collections, which will provide a dedicated Greek classification alternative to that of Web Dewey.

#### **Keywords**

Dewey Decimal Classification System, Association of Greek Librarians and Information Scientists, Greek literature, Greek history and geography, Orthodox Christianity

## ***Civic Engagement Week: A Case Study of Harnessing the Campus Community for Civic Action***

***Eugenia Opuda<sup>1</sup> and Elizabeth Fowler<sup>2</sup>***

<sup>1</sup>Assistant Professor; Health and Human Services Librarian  
University of New Hampshire, Durham, United Kingdom

<sup>2</sup>Assistant Professor; User Engagement and Student Success Librarian  
University of New Hampshire, Durham, United Kingdom

**Abstract.** In a highly polarized political landscape, recent US elections have required robust civic action and vigilance around political discourse. Legislative decisions over the past few years have high stakes impacts on democracy. Recent examples of harmful political decisions include the erosion and restriction of abortion rights, threats to the safety and liberties of transgender people, and the enforced censorship in schools and libraries on topics of race and gender diversity. In this poster, the authors will describe how they facilitated the University of New Hampshire's (UNH) first online Civic Engagement Week leading up to the 2020 presidential elections. They will describe how they coordinated with multiple campus partners to repurpose existing civic engagement presentations and events, and how they designed and launched a social media campaign to encourage participation during a global pandemic. The authors will also identify lessons learned and how they will use those lessons to plan and implement a Civic Engagement Week for the upcoming 2024 presidential election season.

Historically, civic engagement related presentations and workshops at UNH were ad hoc and isolated occurrences. For example, the UNH Library created an annual interactive display of voting information in the physical library space, and occasionally held separate workshops on engaging with elected political officials. In September 2020, the authors reached out to library colleagues as well as to campus partners such as the Carsey School of Public Policy and the Beaugard Center for Equity, Justice, and Freedom to bring together what had been multiple, separate presentations and workshops into one civic engagement themed calendar of events. These events took place for one week in October, a month before the US presidential elections. Events included presentations and workshops on internet and protest security, using technology to reach out to state and national representatives, strategies for activism, and a civic engagement themed Wikipedia-Edit-A-Thon. The COVID-19 pandemic introduced some logistical challenges in planning and hosting the Civic Engagement Week. All events and workshops were held online, and the authors developed a social media marketing campaign for the event to encourage online participation. The events were promoted through the UNH Library Event Calendar, Facebook, Twitter, and Instagram. In anticipation of the

2024 presidential elections, the authors plan to coordinate a second Civic Engagement Week. Some lessons learned from the first Civic Engagement Week will inform the strategy for the next iteration including: 1) increasing coordination with campus-wide student organizations and local public libraries to drive student and community engagement, 2) improving social media marketing through the creation of a multi-office social media marketing team, 3) incorporating best practices related to accessibility and inclusivity, 4) expanding the speakers and topics covered, 5) seeking funding to compensate speakers, and 6) connecting the event with other relevant and timely initiatives such as International Open Access Week. Hosting a more robust second Civic Engagement Week event positions the library as a key facilitator and collaborator in active citizenship in the broader community, while simultaneously upholding the American Library Association values of democracy, diversity, and social responsibility.

**Keywords:** Active citizenship, Politics, Civic engagement, Collaborations, partnerships, Social media.

## ***Cultivating Community through Peer Teaching in the Libraries***

***Alexa Carter***

North Carolina State University, Raleigh, U.S.

**Abstract.** The demand for advanced research skills and information literacy instruction has greatly increased at North Carolina State University. In response to this growing need, the North Carolina State University Libraries developed a program to actively engage and promote the expertise of early career researchers while also expanding the Libraries' workshop programs. The Peer Scholars Program gives graduate students and postdoctoral researchers the opportunity to teach core and emerging research skills in the Libraries to the campus community. Scholars who join the Program partner with research librarians to develop and lead interactive library workshops, creating a platform for them to diversify their teaching portfolios while cultivating connections with peer researchers. Workshop topics have ranged from advanced programming and data science skill development to scientific writing, best practices for building a scholarly identity, and navigating various stages of the research process.

This presentation will share details about the creation, deployment, and assessment of the Peer Scholars Program. The author will discuss the goals and benefits of the Program, including scaling up library-hosted workshops offerings, collaboration with campus partners, and building a community



of practice focused on peer teaching and learning on campus. The presentation will also propose recommendations for enhancing and sustaining professional development opportunities for early career researchers.

**Keywords:** Peer teaching, Research skills, Experiential learning, Library workshops, Graduate students, Postdoctoral researchers, Early career researchers, Campus partners.

### ***Cultural Heritage of the University Library «Svetozar Markovic»***

***Aleksandar Jerkov, Marija Bulatović, Vasilije Milnović, and Vera Petrović***

University Library "Svetozar Marković", Belgrade, Serbia

**Abstract.** The University Library "Svetozar Markovic", as one of the institutions of culture of national importance, has an important task and obligation to take care of the cultural and historical heritage of Serbia and make it accessible to all interested users.

A large part of the rich collection is digitized and available on the library's website as part of the digital library and can be found at the link: <http://www.unilib.rs/content/digital-collections/>.

The content is divided into four parts, and among them there are also digitalized books and newspapers.

The collection of books is divided into 12 parts. Among them, they stand out for their rare and valuable contents:

- A collection of old and rare books,
- A collection of old and rare grammar and grammatical polemics,
- A collection of old and rare books for children and young people,
- Jovan Jovanović Zmaj Collection in the University Library Fund,

The collection of old and rare books contains 16 digital documents with a total of 2,548 pages. In addition to the Flower Triod and the Four Gospels, Matija Karaman's Primer of Slavic Literature from 1753, Italian Grammar, Lives of the Saints of Serbian Educators, Simeon and Sava.

The collection of old and rare grammars and grammatical polemics contains 15 digital documents with a total of 2,702 pages. Among them are: Excerpt from Serbian grammar, About the Serbian language, Little Serbian grammar, Serbian syntax.

The collection of old and rare books for children and young people contains 21 digital documents with a total of 3,535 pages. Among them: Golden grains for young and old, Šumadinče Ljubmir Nenadović, Uncle Tom's cradle, A basket of flowers, Robinson jr. translated by Milorad Petrović Šapčanin.

The Jovan Jovanović Zmaj collection in the University Library collection contains 31 digital documents with a total of 3,565 pages. Among them: Eastern pearl, Neven, Đulići uveoci, Uncle Job to Serbian children, as well as the letters of Jovan Jovanović Zmaj. Among the digitized documents there are also manuscript poems with illustrations by our famous children's poet.

The collection of newspapers represents the content digitized by the "Svetozar Marković" University Library from Belgrade as part of the Europeana Newspapers project is located in the Historical Newspapers collection is displayed using software that is partially based on the open source software bnlviewer developed by the National Library of Luxembourg. The newspaper collection is divided into periods:

- Second World War
- Interwar periodicals
- Periodicals from before the First World War
- Periodical written in the old orthography
- Post-war periodicals
- The First World War and the Balkan wars

Digitized historical newspapers can be searched within the framework of ordinary and advanced search. An overview of digitalized newspapers is also given. A total of 59 newspaper titles were digitized, including: Beogradske novine, Večernje novosti, Vreme, Glas naroda, Kolo, Težak,... By selecting the desired title, the field for selecting the year and the field for selecting the date appear.

**Keywords:** Cultural heritage, Digital library, Book collection, Newspaper collection, University Library «Svetozar Marković».

## ***Illicit Drug Use in Ontario, Canada and its Implications for Public Libraries***

***Johnny Tang, Todd Coleman PhD., Robb Travers PhD***

**Abstract.** The Healthy Immigrant Effect (HIE) is a phenomenon found in immigrants to Canada. It describes a significant health superiority of immigrants on a plethora of health measures when compared to those Canadian-born. Currently, it is not clear whether the HIE extends to illicit drug use; that is, immigrants are less likely to use drugs. Using Statistic Canada's Canadian Community Health Survey cycles 2017-2018, this research analyzed how immigrant and Canadian-borns in the province of Ontario differed in their likelihood of drug use. Two separate binary logistic regressions were completed using STATA 13. Regression results

show that immigrants were found to be 55-60% less likely to use drugs when compared to Canadian-borns. Regardless of immigration status, those who feel weak social belonging to their community were at 20% increased risk when compared to feeling very strong belonging. Finally, those who had self-perceived very good or excellent mental health were at 28% and 43% decreased risks respectively for drug use compared to those with poor mental health.

Based on the results, this session explores the roles of public libraries in Canada. Libraries offer a wide selection of reading and listening materials, such as books, music discs, and movies, in diverse languages; therefore, immigrants and Canadian-borns alike may find something that piques their interest. This is greatly helpful to their mental health. Libraries are also excellent hubs for organizing community events. Notable examples of these include book clubs, chess lessons, and workshops by guest lecturers. Over time, those who frequently participate in these events would find social belonging. More importantly, drug use near libraries is common, and the library itself can act as a strong first line of defense. Some Canadian libraries are currently dealing with frequent drug overdoses, and are successful at administering drug antagonists (like Naloxone) in a timely manner. To tackle the drug crisis in Canada, more libraries must increase its strength with regards to all three aforementioned aspects.

## *Out of Site out of Mind*

**Bronwen Taylor and Amy Allenspach**

The University of Sydney, Library, NSW, Australia

**Abstract.** As libraries continue to move online, the role of the digital catalogue has become crucial to discoverability and collection maintenance. The reliability of this source of truth can be compromised when third-party, offsite physical storage facilities used to house low-use library collections have different approaches to database entry and maintenance for their inventory management systems. In these scenarios, the inventory management systems used by the storage service provider should mirror the collection records within the Library catalogue for those items held within off-site storage. This presentation will describe a 12-month project by University of Sydney Library staff in collaboration with a storage service provider to remediate their inventory management database of library holdings that had deteriorated over 10 years of inconsistent management, to accurately assess the state of the stored collection, ensure physical items in offsite storage are accessible to library patrons and set up standards for future database entry and management.

## **Background**

The University of Sydney Library maintains a physical collection of over 2,300,000 books, journals, and other collection materials. To resolve the competing demands on the limited spaces available for library services the University of Sydney Library has worked with a storage service provider to provide physical offsite storage for lower use items since 2012. This facility houses our largest physical collection, comprising of over 1 million titles. However, the accuracy of the vendor's inventory management database had deteriorated due to a variety of factors which meant that many items in the Library's online catalogue could not be located in storage and were effectively inaccessible to patrons.

## **Project**

At the onset of the project we established a working group which included staff from the Library and the storage service provider and a collaborative framework that set out standards for database entry, maintenance, communication and record structure.

Firstly, the remediation process quantified major data issues which included concatenated records, duplicate records, corrupt and missing data, and inconsistent separators.

Then the data integrity team of the storage service provider used a sample of those errors to develop a Python script that corrected most errors. The Library worked with the service provider to provide any missing or corrupted metadata and catalogue items with no identifiable information.

The Library team provided quality assurance which, due to the multitude and inconsistency of errors, required constant oversight to ensure data integrity wasn't compromised and metadata standards were maintained.

Over 700,000 records have been reviewed through the first phase of data cleansing in this process improving the discoverability of stored physical items and revealing items thought lost or missing.

## **Conclusion**

The fundamental differences between the structure and use of the storage firm's inventory management database and the Library's catalogue meant the alignment between these two types of databases were easily eroded by changes to systems, personnel, and standards.

A consistent, collaborative relationship between Library staff and the staff that maintain offsite physical storage, as well as reliable data and metadata, are essential for future proofing our source of truth.

**Keywords:** Physical storage, Database remediation, Metadata, Collaboration, Quality assurance.

## ***Searchable Digital Library Pretraziva.rs as an Important Factor in Discovering Balkan Cultural Heritage***

***Nataša Dakić, Dragana Janković, and Adam Sofronijević***

University Library «Svetozar Marković», Belgrade, Serbia

**Abstract.** Searchability of digitized cultural heritage materials is a prerequisite for their effective use in the context of large digital libraries. The possibility to really find and use elements of cultural heritage forms an important base for the development of creative industries because the past and the heritage accumulated in it is the base for building a creative future, which is the essence of creative industries. This work provides an overview of activities on the digitization of cultural heritage, which resulted in the existence of the largest searchable digital library of the Western Balkan region, pretraziva.rs, as an important illustration of the existence and use of searchable cultural heritage content for the construction of cultural industries.

The process of digitizing old publications in the University Library Belgrade began in 2008 with the aim of preservation the old and very valuable collections, when University Library established its first Digital repository, entirely due to the efforts of the employees. Digitization has started with Cyrillic manuscripts, which are located in the Registry of the National Cultural Heritage. The inclusion of the University Library in 2010 in the large European project Europeana Libraries: aggregation of the digital content of European libraries was a great stimulus for us. Within this project, we digitized many valuable collections and enabled to present our values to users around the world. Unfortunately, these collections are only scanned as jpgs and searchable only by metadata. A turning point in the development of our digital library is participation of University Library Belgrade in Europeana Newspapers Project (2012-2015). On that occasion, more than 400.000 pages of Serbian newspapers issued in the period 1850-1945 from 45 titles were digitized and the biggest result is formation of the first searchable digital newspaper collection in 2015. In the meanwhile, we became the leading library in Serbia regarding digitization and preservation of various types of documents and publications. Also, we began the process of digital democracy, which is represented primarily by the extension of available digital content in cooperation with other cultural and scientific institutions in the Balkan region. These activities consequently resulted in the creation of the portal called Searchable Digital Library, available at <https://pretraziva.rs/>. Today, Searchable Digital Library, which enables the full text search, contains more than 1,300,000 pages. Associating with other institutions, in addition to saving resources,

time, money and increasing the quality of library services, it also contributes to the promotion of authentic content and increasing the visibility of local history collections that certain libraries have. Some of the portals created by a selection from the materials of the largest digital searchable library of the Western Balkan region, which were formed by numerous cultural institutions, collaborators in the upbuilding of this library are: Mexico in the historical press of Serbia, Digital plum, Epidemics, Greenland in the historical press of Serbia, Žiža Monastery - the power of spirituality that lasts through the centuries. The effective availability of cultural heritage materials produces real opportunities for the development of creativity, which is certainly an important prerequisite for creative industries. The quick and easy development of numerous thematic portals based on the materials of the Searchable Digital Library presents a roadmap for the future development of concrete elements of products and services of creative industries.

**Keywords:** Cultural heritage, Creative industries, Digitization, Digital libraries, Searchability, Library cooperation, Digital democracy.

## ***Transforming Data into Meaning: Creating Multi-Purpose Environmental Data Visualisation***

***Amy Allenspach and Bronwen Taylor***

The University of Sydney, Library, NSW, Australia

### **Abstract**

**Background.** The University of Sydney Rare Books & Special Collections contains more than 170,000 unique items including early printed books from Europe, Australia, America, and Asia. One of the significant findings in the collection includes a 1497 copy of Dante's Divine Comedy which, in 2017, was discovered to contain a hand drawn death notice of Renaissance painter Giorgione. The long-term preservation of these fragile printed materials requires the maintenance of a constant temperature of between 15-25°C and relative humidity of between 45-60%. In the subtropical Sydney climate this requires purpose-built facilities and careful monitoring.

When the Rare Books collection area was established in Fisher Library, a heritage listed building originally constructed in 1963, University Infrastructure installed multiple sensors to monitor temperature and humidity in the Rare Books storage areas. These sensors are linked to a centrally-managed building management system (BMS). But after a mould outbreak in late 2018, the Library installed additional sensors in areas with

poor airflow such as compactor shelves and cabinets to capture more detailed information.

In 2022, the University of Sydney Library announced extensive building works to Fisher Library, which included upgrades to the heating ventilation and air conditioning (HVAC) systems in the Rare Books storage areas. The upgraded HVAC system allows the Library to better control the environment in this area, but new monitoring systems were not a part of this upgrade.

**Project.** This poster will describe the project of reengineering existing environmental monitoring data to create useful, multipurpose visualised information. This includes creating use cases with stakeholders, the technical processes followed, and draft outputs delivered through transforming environmental data from point in time reports into dynamic, interactive dashboards.

As the information in these dashboards is being consumed by multiple audiences with different needs, user centred design principles were employed to ensure the end product is meaningful to all users. The building upgrade project team needs to monitor the impact of the changes to the HVAC system while the works are under warranty and demonstrate the impact of these works to the University. The Rare Books team need the ability to monitor environmental fluctuations and compare changes over time.

Library owned sensor data was converted from a proprietary format to csv files and uploaded to a secure SharePoint document library. Power BI was used to link the SharePoint document library to data from the BMS sensors and calculate preservation metrics for the different storage rooms. Visualisations displayed temperature and humidity variation by room for the past 2 years and could be drilled down to hourly readings.

**Next steps.** This project is still in progress working in collaboration with end users. Potential enhancements include aligning room data with building maps, including current and historical weather data, and providing email alerts when environmental conditions fall outside of acceptable standards.

**Conclusion.** This project has proven that data from small, cost effective, self-contained environmental sensors can be effectively combined with sophisticated reporting technology to deliver meaningful information to end users with conflicting reporting needs.

**Keywords:** Data visualisation, Environmental data, Collection Preservation, User centred design.

## ***Unexpected Liaisons: The Role of a Digital Fabrication Lab in Redefining the Library's Image***

***Varvara Kountouzi***

Head of Digital Media and Virtual Services at the Biomedical Library of the University of Pennsylvania, U.S.

A health sciences library at a major academic university began its venture into the exciting world of 3D printing in December, 2014. Six years later the service has expanded to include multiple 3D printing technologies and materials, 3D design consultations, laser-cutting and 3D scanning. In this session we will describe the experience from the inception of the plan to the present, with emphasis on the unexpected benefits that the unconventional new service brought to the library: new collaborations with various departments and schools, co-authorship in publications, and a niche position in the university's fabrication network that is redefining the library brand. We will describe the quantitative assessment methods through extensive and systematic data-gathering as well as our qualitative methods through user stories and publicity in a variety of media.

**Keywords:** Technology, Research, Multidisciplinary, Collaboration, Partnership.

## ***University Library Belgrade as a Hub for Balkan Citizen Science Activities***

***Aleksandra Trtovac<sup>1</sup>, Nataša Dakić<sup>2</sup>, and Dragana Janković<sup>3</sup>***

<sup>1,2,3</sup>University Library „Svetozar Marković“, Belgrade, Serbia

**Abstract.** Open Science (OS) has become a catalyst in shaping research and society in the EU by supporting science in meeting the grand challenges our societies face today. OS shapes the scientific and societal transformation for accountability, transparency and sustainability. One of the OS components is Citizen Science (CS), which has been acknowledged as a pivotal field for the new generation science and has been growing exponentially the last few years, with hundreds of scientists already leading CS projects and millions of volunteers participating in increasing number of CS initiatives. But there is a need to develop a connecting anchor between society & science and research libraries are key actors. Many libraries have developed CS supporting services, others rely on citizens to process their collections, whereas CS initiatives have partnered with academic libraries to develop guidelines for the best possible



implementation. Heading in that direction, University Library Belgrade has become a partner in an on-going three-year project Citizen-Enhanced Open Science in Southeastern Europe Higher Education Knowledge Hubs (CeOS\_SE), funded by the European Union's Erasmus+ Programme and coordinated by LIBER. The aim of the project is to raise awareness and mainstream practices in SE European countries (BG, CY, EL, HR, IT, RS), that perform less well in OS/CS and have low awareness on/involvement in major development. Also the CeOS project serves to connect three features which are complementary but have not been matched all three so far: enable knowledge transfer from more experienced partners to less experienced ones, perform Citizen Science activities for Open Science, as well as provide information and the tools for policy change and uptake of CeOS. Special part of the project aims on creation and integration of Citizen Science concepts in Higher education curricula in Library studies in Southeast Europe. The main goal of the University Library Belgrade is to connect academic and public libraries in Balkan region, transfer knowledge and become a hub for education in region regarding Citizen Science. Therefore, Roadmap on CeOS in the Balkans is being creating with a help of our local partners. During the project period, University Library Belgrade project team has been organizing several workshops for librarians and researchers with the focus on introduction to the concept of Citizen Science, promotion the principles of Open and Citizen Science, as well as on presentation best practice experiences. We also conducted numerous activities regarding implementation of these concepts on concrete examples, such as Language Laboratory, Wiki Librarian, Wiki Marathon or Democratization of Digitization in Libraries. Also by using a Train-the-Trainer approach, University Library Belgrade project team attempts to upskill more trainers/multipliers to support researchers, HE staff, public libraries and citizens at their institutions, providing potential of libraries as knowledge and innovation hubs, as well as to raise awareness on CeOS and build expertise. By involving with this project, we hope that library will transform into innovative future place based on synergy and collaboration with citizens. That kind of a library would enable launching projects of public engagement, which would be set up for the benefit of local societies. On the other hand, Higher education institutions will have an opportunity to demonstrate their role in strengthening the academia-society relationship.

**Keywords:** Open Science, Citizen Science, CeOS, Academic libraries, Public libraries, Citizens, Volunteers.

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