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WBIMLC 2020

Information literacy: know it, teach it, live it

&

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Bihac 2020
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Introduction

The Western Balkan Information and Media Literacy Conference is supported, inspired by and dedicated to the work and achievements of European Union Capacity Building in the Field of Higher Education (CBHE) project 561987 Library Network Support Services (LNSS): modernizing libraries in Western Balkan countries through staff development and reforming library services, as a sustainability of the project. This is a unique, pioneering European Union funded project which aims to reinforce and modernize libraries and improve the level of competencies and skills of library staff in the Western Balkan countries by developing innovative libraries as a support to education and lifelong learning.

CBHE is the European Union's program which aims to support the modernization, accessibility and internationalization of higher education in the Partner Countries in regions such as Eastern Europe, Central Asia, the Western Balkans and the Mediterranean region, mainly through university cooperation projects. The wider objective of the LNSS project is to reinforce and modernize libraries and improve the level of competencies and skills of library staff in the Higher Education Institutions (HEIs) and in Society by developing innovative libraries as a support to education and lifelong learning. The specific objectives of the project are to implement English for Specific Purposes (Libraries & library terminology) training for all target groups; to undertake in depth training needs detection and assessment with competency mapping; to implement an innovative Train the Trainers program as part of an LNSS Curriculum incorporating a suite of quality, relevant and modern library staff development modules addressing the most urgent training needs of 21st century librarians and library staff in the Information Age.

The project will develop and implement IL and Research Skills training programs in libraries and in HEIs to help learners identify, locate, evaluate, and effectively and ethically use information in their daily lives for lifelong learning and the Knowledge Economy. Other key objectives are to hold Library Training Seminars and Workshops involving all Stakeholders for exchange of experience to improve the competencies and skills of Librarians. Strategic planning issues are also addressed such as the development of a Consortium Strategic Plan for the effective future development of libraries in both Regions and to implement this plan. The project will also develop initiatives to ensure access to and democratization of libraries for people with disabilities. Development of Frameworks for Library Collection Development Policy to meet the needs of academic staff and students in each Institute/University in the project are also a key goal. There were more projects that derived from this action such as LNSS in Armenia, Moldova and Belarus (https://lnss-projects.eu/amb/), as well as DIREKT-Project developing trans-regional IL for lifelong learning and the knowledge economy in Europe and Asia (https://direkt-cbhe.com/).

The Conference takes its inspiration also from previous European Union projects such as Tempus Project 517117 Developing information literacy for lifelong learning and knowledge economy in Western Balkan countries. This was a unique, pioneering European Union funded project which developed information literacy for lifelong learning in the Western Balkans during the period 2011-2015. The Western Balkan Information and Media Literacy Conference is now listed among the most important Information Literacy Conferences of the World. At this year WBIMLC has attracted delegates from all over the world. Apart from the representatives coming from Bosnia and Herzegovina there will be delegates for example from Egypt, India, Ireland, South African Republic, Norway, Greece, Slovenia, Croatia, Serbia, Turkey, Saudi Arabia, United Arab Emirates, Bangladesh, Iraq, United Kingdom, Georgia, Kazakhstan, Portugal, Thailand, USA etc. As a result of the involvement of leading international experts in the IL field in WBIMLC, the concept of Information Literacy which prior to WBIMLC was almost completely unknown in the Western Balkan region has firmly taken hold and is now embedded in many universities in the Region.

This conference presents Conference papers in two sections. First presented are those papers by the keynote and guest speakers. Later in the proceedings are the papers of those representatives from many other parts of the world who recognise that the Western Balkans due largely to the
work of this CBHE project and previous projects is now becoming an important centre and champion of information literacy globally. The conference emphasises the positive influence of European Union funding programmes in regions such as the Western Balkans in accelerating strategic engagement with IL in the region making Information literacy a high priority for both educators and learners in the Western Balkans into the future.

We must be mindful also that Information Literacy is no longer a university or even library centric phenomenon as commentators such as Paul Zurkowski have already proposed. Now a more universal approach is needed across all sectors and affecting all citizens and Society in general. This has recently been highlighted by the Chartered Institute of Library and Information Professionals (CILIP) in the UK and their high level definition of Information Literacy which has recently been launched (April 2018):

> Information Literacy is the ability to think critically and make balanced judgments about any information we find and use. It empowers us as citizens to reach and express informed views and to engage fully with Society CILIP 2018, available: [https://infolit.org.uk/new-il-definition/](https://infolit.org.uk/new-il-definition/)

WBIMLC 2020 celebrates the clear enthusiasm and passion of IL enthusiasts not only in the Western Balkans but on the international level. Given the topic of this year’s Conference, Information literacy: know it, teach it, live it WBIMLC 2020 also highlights the relevance of Information Literacy in today’s world.

Information Literacy can be a very convincing antidote to these complex issues. IL can help us decipher whether information is accurate and trustful, enables is to look at who is behind the information, how they operate, what motives they might have. IL helps us to be free when rejecting or accepting it.

Getting to the truth with Information Literacy.

**Amalgamation of International Summit of the Book with WBIMLC 2020.**

This year, the International Summit of the Book was held in conjunction with the Western Balkan Information and Media Literacy Conference (WBIMLC). Owing to unprecedented challenges encountered with Covid 19, we have decided to amalgamate these two important conferences for just this one year.

We want to ensure that these two important and far-reaching events take place in 2020 despite this dreadful worldwide pandemic. We are fighting to keep the International Summit of Book, now in its 9th year, alive and thriving despite the recent trials and tribulations in Beirut, Lebanon last year when the Summit unfortunately could not take place owing to the political situation in Lebanon at that time.

We also want to continue the momentum and tradition of holding our fantastic Information and Media Literacy conference in Bihać, Bosnia and Herzegovina, one of the few International Library or Information Literacy conferences that will take place in 2020. As we all know 2020 is different, unprecedented many would say.

So, we did it differently this time. Online was the main expression of these conferences and both the Summit and WBIMLC 2020 were held virtually for the first time.

These two conferences were momentous and historic events in what will be an unforgettable year for the library community and all humanity.

**About the International Summit of the Book**

The “International Summit of the Book” is a US Library of Congress initiative. The Summit discusses the development of books into electronic formats and its impact on reading: the challenges facing books and the publishing industry, as well as the role of books and reading in societies. The Summit also discusses key issues on technology and manuscripts, including the role of translation in the preservation and transmission of culture, and books as an important tool in
cultural exchange. In previous years the Summit has been held in across a number of continents and cities that have a global cultural impact in countries such as the United States, Singapore, France, Egypt, Ireland, Romania, Azerbaijan, and now in Bosnia and Herzegovina.

The opening speech was delivered by H.E. Myles Geiran, Ambassador of Ireland in Slovenia accredited to Bosnia and Herzegovina. The keynote and guest speakers were Christine Mackenzie, the President of IFLA, Ismail Serageldin, Tamar Kintsurashvili, Tefko Saracevic, Melius Weideman, Dilara Begum and the special panel discussion guests Froge Hegland and Vinton G. Cerf.

What a great and unforgettable event.

*Editorial Board WBIMLC2020 & 9th Summit of the Book*
KEYNOTE SPEAKERS, GUEST SPEACERS AND PANEL DISCUSSION PARTICIPANTS

Christine Mackenzie

Christine Mackenzie is President of IFLA (International Federation of Library Associations and Institutions). She retired as CEO of Yarra Plenty Regional Library Service, Melbourne, Australia in 2016 after 12 years in that role and following a long career in public libraries. Previously she was Manager of Brisbane City Council Library Service, the largest public library system in Australia.

Christine has been very active in IFLA and was President elect 2017 – 19 and Treasurer 2015-17. She was a co-founder of INELI-Oceania, a program funded by the Bill & Melinda Gates Foundation that provided leadership training for librarians in Australia, New Zealand and the South Pacific and which sponsored the formation of the Pacific Libraries Network in 2018. She has been a member of the Australian Government’s Public Lending Rights Committee; the Library Board of Victoria’s Advisory Committee on Public Libraries; the Victorian Government’s Ministerial Advisory Council on Public Libraries; the Executive of the Public Libraries Victoria Network, and a juror for the Intelligent Communities Forum. She has held a number of roles in ALIA including President 2003-04. She was awarded an ALIA fellowship in 2008 and the VALA Robert D Williamson Award in 2012.

More information: www.christinemackenzie.com.au

Ismail Serageldin

Ismail Serageldin is the Emeritus Librarian of Alexandria, and was the Founding Director of the Bibliotheca Alexandrina, the New Library of Alexandria (2001-2017) in Egypt. Before that he was the Vice-President of the World Bank (1993-2000), and Chairman of the Consultative Group for International Agricultural Research (CGIAR), Founding Chairman of The Consultative Group to Assist the Poorest: A micro-finance program (CGAP), and the Global Water Partnership (GWP).

He currently serves on many advisory boards and committees for academic, research, scientific and international institutions and civil society efforts, including as Co-Chair of the Nizami Ganjavi International Center (NGIC). He is also a Patron of the International Science Council (ISC).

He has received many awards including the Order of the Rising Sun of Japan, The Pablo Neruda Medal of Chile and is a knight of the French Legion d’Honneur and a Commander of Arts and Letters of the French Republic.

He graduated from Cairo University and holds a PhD from Harvard University. He was a distinguished professor at Wageningen University and the College de France in Paris. He has lectured widely, published more than 100 books and 500 articles, and has received 38 honorary doctorates from all over the world.
Tamar Kintsurashvili

Tamar Kintsurashvili is an Executive Director of Media Development Foundation (MDF). Tamar is an author and co-author of numerous researches and publications on hate speech, anti-Western propaganda, Kremlin Influence Index, media literacy. She is an editor-in-chief of fact-checking online portal Myth Detector and runs Deutsche Welle Akademie youth project aimed at equipping non-journalist youngsters with tools to distinguish real news from manipulated content. Tamar is a member of Deutsche Welle Akademie Media and Information Literacy Experts Network (MILEN). Tamar Kintsurashvili is associate professor at Ilia State University. Previously, Kintsurashvili was the first elected General Director of the Georgian Public Broadcaster (2005-2009).

Tefko Saracevic

Studied electrical engineering at the University of Zagreb, Croatia; completed Master (1962) and Ph.D. (1970) studies in information science at Case Western Reserve University, Cleveland, Ohio, USA. Stayed at Case till 1985, when moved to Rutgers. Promoted to Distinguished Professor in 1991. Professor Emeritus since 2010. Presented papers at international meetings in 48 countries. Was the president of the American Society for Information Science; received the Society’s Award of Merit (the highest award given by the Society). Also, received the Gerard Salton Award for Excellence in Research, by the Special Interest Group on Information Retrieval, Association for Computing Machinery (also the highest award given by the Group). As of October 2019, he has received 4,980 citations in Scopus database (the largest abstract and citation database of scientific journals, books, and conference proceedings; excludes self-citations). In Google Scholar (with a broader coverage of all kind of documents in addition to journals) he received 13,737 citations.
Prof. Melius Weideman is the founder and leader of WARC - the Website Attributes Research Centre at CPUT in Cape Town. His research interests were initially focussed on computer viruses, but after 1994 the Internet, and specifically search engines started fascinating him. He graduated with a Doctorate in Information Science from the University of Cape Town in 2001, and numerous of his publications have seen the light since then on topics including website visibility, website usability, search engines, internet marketing and information retrieval. Melius has a strong international presence, and has delivered many international guest lectures and plenaries over the years. He has been invited by various European universities as Guest Professor, presenting sessions ranging from short lectures to semester courses (5 European credits). During 2007 he was chosen from 40 international applicants to become the first Fellow at the Munich University of Applied Sciences. In mid-2008 he spent three months teaching at this university. Campus02, in Graz, Austria invited him to do two workshop series on Internet Marketing through Websites in 2008. He also spent 3 months at MUNI in Brno, Czech Republic, (2012/2013) on an Erasmus Mundus Scholarship. He was appointed as an Associate Professor in 2004, and a full Professor at CPUT in 2008, and is an NRF rated researcher. Melius lives near Cape Town in South Africa, and enjoys spending time with his family and for recreation cycles, reads and is an avid amateur photographer. He has completed 25 (consecutive) Argus Cycle Tours, four Double Centuries and 1.5 ABSA Cape Epic tours. His research work and outputs are described on.

Dr. Dilara Begum is the Associate Professor and Chairperson in the Department of Information Studies and Library Management at East West University. She has completed her B.A. (Hons.) and M.A. from University of Dhaka and Ph.D. from Punjabi University, India. Her research interest includes information management, digital library, information literacy, open access and others. She is currently acting as the information coordinator in Asia and Oceania Section and Standing Committee Member in Management and Marketing Section at International Federation of Library Associations and Institutions (IFLA). She is also acting as General Secretary, DLNetSA. Beside these, she also played significant and diversified role such as: Country Coordinator of Information Literacy Consortium sponsored by UNESCO, Standing Committee Member of ECIL in 2013 to till now, elected Senior Vice President and Women Affairs Secretary of Library Association of Bangladesh (LAB) from 2009-2014. She was also the President (Acting) of Library Association of Bangladesh (LAB) in 2011. She has more than Forty (40) national and international publications. She is considered one of the pioneer of Digital Library building in Bangladesh and as well as an international expert on the mentioned field. She has been awarded with the prestigious award, "Prof. Indira Parikh 50 Women in Education Leaders" on 05th July 2018 in Mumbai at the World Education Congress recognizing her contribution in education.
Frode Hegland

Frode Alexander Hegland is a software developer creating augmented text software for macOS, Editor of ‘The Future of Text’ book and host of the annual Future of Text Symposium.
https://futuretextpublishing.com https://www.augmentedtext.info

Vinton G. Cerf

Vinton G. Cerf Vice President and Chief Internet Evangelist for Google.
Vinton G. Cerf is vice president and Chief Internet Evangelist for Google. With Robert Kahn, Vint is the co-designer of the architecture of the Internet. In 1997 they received the U.S. National Medal of Technology and in 2005, the Presidential Medal of Freedom and the ACM Turing Award. In April 2008 they shared the Japan Prize for their work and in 2013, the Queen Elizabeth Prize for Engineering. He is a member of the US National Academies of Science and Engineering and the Legion d’Honneur.
Vint Cerf served as chairman of the board of the Internet Corporation for Assigned Names and Numbers (ICANN) from 2000-2007 and he has been a Visiting Scientist at the Jet Propulsion Laboratory since 1998.
He holds a Ph.D. in Computer Science from UCLA and twenty-nine honorary degrees.
BOOKS AND LIBRARIES ENABLING A SUSTAINABLE,
FAIRER WORLD THROUGH UNIVERSAL LITERACY

Christine MacKenzie
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ABSTRACT
Books, reading and literacy are inextricably linked. According to the United Nations, despite the steady rise in literacy rates over the past 50 years, there are still 773 million illiterate adults around the world, most of whom are women. Libraries have and continue to be a vital enabler of literacy and reading. Universal literacy is recognised in the vision for the UN 2030 Agenda - “We envision...a world with universal literacy.” Creating a sustainable and fairer world is one of the most important roles that IFLA and libraries have – all kinds of libraries in all countries. Information and literacy underpin all targets and literacy is an essential life skill; fundamental to all learning, and integral to literate, informed and participative societies. Libraries play a crucial role connecting people to books and information by helping people learn new skills, discover history and culture, and access research. Access to information can only be meaningful if individuals have the skills, and social and cultural possibilities to access, apply and create information. Partnerships are essential to promoting books, reading and literacy. This presentation on the importance of books, literacy and reading will highlight particular examples of how libraries are helping to achieve the 17 Sustainable Development Goals and so enable a sustainable and fairer world.
ABSTRACT

The 21st century has brought about an enormous transformation in how research is being done: Instead of lone researchers, we have teams, and increasingly multi-disciplinary teams that are increasingly based in various countries as our communication tools become ever more powerful. Instead of small experiments or small surveys on-campus, we have Big Data, and Big Data Analytics. High-powered computers and use of imaging, and increasingly the use of AI and Virtual Reality, create a totally new type of atmosphere in which to search for better understanding of nature and society. With almost everything on line, almost instantaneous publishing and the movement towards Open Science, the relationship of each scientist to the global scientific effort will be different than it was in the past. Also given the remarkable possibilities that new revolutions in both Biology and ICT (including AI) are creating the exercise of ethical judgements will be essential. It will be a major transformation, creating a new paradigm for research.

This will require an understanding of these transformations. It becomes important to understand what needs to change in the education systems and the way we teach our children to learn. And finally, libraries, as a basic element in the education system of society, preserving societal memory and nurturing the invention of the new, will also have to reinvent themselves.
ABSTRACT
If human language is the greatest human achievement, then the writing of that means of communication is what has defined societies and civilizations and saved their legacies for posterity. In that context, the Book, appears as much more than a convenient way to record some information, or as a means of entertainment, but rather it becomes the central instrument of societal expression, the avatar of contemporary humanity.

Today the platforms on which we interact with books cover the range from the conventional codex to the e-book on computer or tablet or mobile phone, or audio-books... we also recognize new forms of books: as in the graphic novel. And the book also competes with complementary, different forms of expression: Film, TV and video-games. But books, we believe, remain the most powerful voice of cultural expression, remain the primary vehicles for the preservation and transmission of text. Books matter. Beyond Drama, the essay, the novel, and the poem remain the primary triad on which the literary terrain is to be surveyed. Text is also about language, and that raises the issues of translation and changes in language over time.

If all that tends to exalt the book, it does. But more, it is rather about the text, that provides context and content, message and meaning, that engages the reader with the author and provides so many of us with what it means to be human.
**DRAWING PAYING CLIENTS: THE VISIBILITY OF UNIVERSITY INFORMATION LITERACY COURSES**

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**ABSTRACT**

**INTRO**

Many universities the world over offer courses on information literacy. It is one of the cornerstone courses which is expected to be available from any university which has a library and/or a library and information science department. It is generally expected that the information about this kind of course be easily accessible to any searcher who would like to identify a university where they could enrol for such a course. The aim of this research project was to determine the degree of visibility of information about such courses offered at universities in general, to users through university websites and search engines.

**LITERATURE SURVEY/METHOD**

A literature survey was done, and it was found that in many cases, universities do offer this kind of course to prospective students. However, it was not always clear how well Information Literacy (IL) courses were being marketed as a standalone course to prospective students. Recent studies have indicated that universities should be run more and more as a business, showing a profit, to survive in the current global economic climate. To this end, IL courses should be marketed to a global audience.

A pilot study was done to determine if the implied research problem was real. This pilot study confirmed the suspicion that many IL courses are not well marketed.

Subsequently, this (full) study was done during which top global universities were identified, each one with one or more libraries. The university websites were investigated to determine if any IL courses were accessible through it. Also, several search queries were done on top search engines, to determine if and what kind of IL courses are available at universities.

**RESULTS**

A large amount of general information and academic publications on IL courses are available through search engines. However, the findings have shown that the top 10 global universities had zero visibility for IL courses offered at those universities – both through close inspection of their websites and through search engine queries.

At the same time, several alternative online IL courses were found, some of them offered without payment.

**CONCLUSION**

In conclusion, it is known that with little effort and costs, both face-to-face and online IL courses can and should be marketed online (using search engine optimisation, paid advertisements and/or social media). This will result in an increase in student numbers and income for the university. It is also concluded that universities should move into the online world and convert some of their courses to be offered in an online format, especially when considering the COVID-19 epidemic and its expected effects on education in the future.

**Key words:** university, information literacy course, website content, search engine, information retrieval

**Conference Themes:** Information Literacy Courses, Information Literacy training and instruction
1. INTRODUCTION

1.1 BACKGROUND

Universities have been moving more towards being run like a business during the past decades, meaning that they must draw more paying clients, and show a profit (Criaco et al 2014; Currie et al 2106; De Zilwa 2005; Orazbayeva et al 2019; Marcy 2017; Peters 1992; Sangster et al 1998; Salazar 2009). At the same time, Information Literacy (IL) courses are offered at many universities and are necessary and important to improve reading and other digital literacy skills (Dreisiebner et al 2019; Gibson et al 2018; Huang et al 2016; Rafi et al 2019; Rapchak 2018; Shenton 2018).

Information about these courses should be very visible on university websites, to ensure that these paying clients are aware of their existence. Academic information should be exposed to search engines, to ensure their wider dissemination (Beel et al 2010; Marks et al 2016; Mixter et al 2014; Weideman 2010b). Marketing of universities and the courses they offer has become essential, and the use of digital and other forms of marketing has become a must for universities wanting to survive financially.

At the same time, online offerings of university courses have become almost the rule rather than the exception (Huang et al 2016). The current COVID-19 pandemic is also expected to have the effect that more students tend to enrol for online courses than for face-to-face tuition.

1.2 RESEARCH PROBLEM

The research problem identified in this research project was that many universities do offer IL courses but are not marketing them well (or at all). This can lead to a loss of income.

A pilot study was done to determine if the implied research problem was real (Weideman 2009). This study did in fact confirm the suspicion that many university-level IL courses were not well marketed at all.

1.3 AIM and OBJECTIVES

The aim of this research project was to determine the degree of visibility of IL courses offered at universities. This aim was achieved through each one of the following objectives:

1.3.1 To identify the current top universities in the world, according to global rankings.

1.3.2 To inspect the websites of the top 10 universities on this list and try to identify any IL courses advertised or described on their websites.

1.3.3 To search for details offered on IL courses offered at universities.

1.3.4 To take an informed decision on the visibility of IL courses offered at these universities, both in general and at specific universities.

2. LITERATURE REVIEW

2.1 GLOBALLY RANKED UNIVERSITIES

A number of institutions do rankings of universities, each one based on a different algorithm, and each one producing a different outcome – see Table 1. These listings have been used to identify the world’s top-ranking academic universities. The websites of those universities were then inspected to find the presence of any IL course being offered at that university.

Table 1: Organisations doing university rankings (Weideman 2019).

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<tr>
<th>NAME</th>
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<th>SOURCE</th>
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<tr>
<td>Academic Ranking of World Universities</td>
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<td><a href="http://www.shanghairanking.com/">http://www.shanghairanking.com/</a></td>
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<td>The World's University Rankings</td>
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</tbody>
</table>
2.2 UNIVERSITY INFORMATION LITERACY COURSES

As noted before, numerous universities the world over offer IL courses to their students (Dreisiebner et al 2019; Gibson et al 2018; Huang et al 2016; Rafi et al 2019; Rapchak 2018; Shenton 2018).

These courses from part of the university’s offerings, and should be marketed, like any other course, to draw paying clients (students) to the university. In many cases, these IL courses form an essential part of many degrees being offered at some universities. It is a must that these (and other) university courses be marketed to the online world, especially with the advent of the COVID-19 pandemic, and the results it will most likely have on face-to-face and online course registrations.

3. METHODOLOGY

3.1 IDENTIFYING A SAMPLE OF TOP GLOBAL UNIVERSITIES.

A sample of universities had to be taken from the population of “all universities in the world”. It was considered prudent to use the global rankings of universities, as calculated by a variety of universities and other bodies on an annual basis. A weighting scale was used to compile a list of the top 10 universities, starting out by considering the top 20 on each one of six different lists.

3.1.1 Lists of the top universities in the world were taken from six different well-known sources (Weideman 2019), if they did provide a clear indication of the algorithm they have used for the rankings. Those sources meeting this condition are listed in Table 1.

3.1.2 A total of 36 different universities were mentioned across these six sources (considering only the top 20 universities from each list) – see Table 2.

3.1.3 For each university in the top 20 of each source, a score was allocated: 20 for the number one university, 19 for number two, down to a score of one for the number 20 on the list.

3.1.4 These scores were added, and the list was re-sorted from the highest total score to the lowest – see Table 3. This list show that the top, second, third, etc universities were, respectively: Stanford, Harvard, MIT (all from the US of A), Oxford, Cambridge (both from the UK), etc.

Table 2: List of universities combined from all six top 20s.

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<tr>
<th>NO</th>
<th>UNIVERSITY NAME</th>
<th>ABBR</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>California Institute of Technology</td>
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<tr>
<td>2</td>
<td>Columbia University</td>
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<td>Cornell University</td>
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<td>4</td>
<td>Duke University, USA</td>
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<tr>
<td>5</td>
<td>EPFL - Ecole Polytechnique Federale de Lausanne</td>
<td>epfl</td>
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<td>6</td>
<td>ETH, Zurich, Switzerland</td>
<td>ethz</td>
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<td>7</td>
<td>Harvard University</td>
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</tr>
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<td>8</td>
<td>Imperial College, London</td>
<td>impe</td>
</tr>
<tr>
<td>9</td>
<td>Johns Hopkins University</td>
<td>john</td>
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<tr>
<td>10</td>
<td>Massachusetts Institute of Technology (MIT)</td>
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<tr>
<td>11</td>
<td>Nanyang Technological University of Singapore (NTU)</td>
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<td>12</td>
<td>National University of Singapore</td>
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<td>13</td>
<td>North-Western University</td>
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<tr>
<td>14</td>
<td>Princeton University</td>
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<td>15</td>
<td>Stanford University</td>
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</tr>
<tr>
<td>16</td>
<td>Swiss Federal Institute of Technology Zurich</td>
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<td>17</td>
<td>The University of Edinburgh</td>
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<td>2</td>
<td>harv</td>
<td>110</td>
</tr>
<tr>
<td>3</td>
<td>mait</td>
<td>110</td>
</tr>
<tr>
<td>4</td>
<td>oxfo</td>
<td>98</td>
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<tr>
<td>5</td>
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<td>93</td>
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<td>colu</td>
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<td>yale</td>
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<td>corn</td>
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<tr>
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<td>ucla</td>
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<tr>
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<td>impe</td>
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<tr>
<td>16</td>
<td>john</td>
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<tr>
<td>17</td>
<td>uncl</td>
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<tr>
<td>18</td>
<td>ethz</td>
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<tr>
<td>19</td>
<td>wash</td>
<td>28</td>
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<tr>
<td>20</td>
<td>miaa</td>
<td>20</td>
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<tr>
<td>21</td>
<td>nany</td>
<td>11</td>
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<tr>
<td>22</td>
<td>nusi</td>
<td>9</td>
</tr>
<tr>
<td>23</td>
<td>ucsd</td>
<td>9</td>
</tr>
<tr>
<td>24</td>
<td>toky</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 3: List of top universities sorted by score.
3.2. INSPECTING TOP UNIVERSITY OFFERINGS OF IL COURSES ON THEIR WEBSITES.
3.2.1. First, the names of the top 10 universities and their websites were extracted – see Table 4.
3.2.2. Next, the websites of these top 10 universities were inspected, and it was determined whether or not each university does offer a general Information Literacy (IL) course.
3.2.3. The method used for each university was as follows - the university homepage was visited, as per Table 4.
3.2.4. Firstly: HOMEPAGE-visual inspection. A visual inspection was done on the university homepage, looking for the phrase: “information literacy”. (If it was found, the IL page was visited to determine if it was in fact a course offered by this university in IL).
3.2.5. HOMEPAGE-Ctrl+F text search. Secondly, a text search was done on the homepage for the same phrase. (If it was found, the IL page was visited to determine if it was in fact a course offered by this university in IL).
3.2.6. HOMEPAGE-Search box. Thirdly, the search feature of the homepage was used to search for the same phrase on the website. (If it was found, the IL page was visited to determine if it was in fact a course offered by this university in IL).
3.2.7. LIBRARY LANDING PAGE-visual inspection. In the fourth place, the university library homepage was identified, and the visual text search was repeated on the library homepage.
3.2.8. LIBRARY LANDING PAGE-Ctrl+F text search. Next, a text search was done on the university library homepage for the specified phrase.
3.2.9. LIBRARY LANDING PAGE-Search box. Finally, the search feature of the library webpage was used to search for the phrase.

Table 4: List of the top 10 university websites.

<table>
<thead>
<tr>
<th>RANK</th>
<th>UNI</th>
<th>SCORE</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>stan</td>
<td>111</td>
<td><a href="https://www.stanford.edu/">https://www.stanford.edu/</a></td>
</tr>
<tr>
<td>2</td>
<td>harv</td>
<td>110</td>
<td><a href="https://www.harvard.edu/">https://www.harvard.edu/</a></td>
</tr>
<tr>
<td>3</td>
<td>mait</td>
<td>110</td>
<td><a href="http://www.mit.edu/">http://www.mit.edu/</a></td>
</tr>
<tr>
<td>4</td>
<td>oxf</td>
<td>98</td>
<td><a href="http://www.ox.ac.uk/">http://www.ox.ac.uk/</a></td>
</tr>
<tr>
<td>5</td>
<td>camb</td>
<td>93</td>
<td><a href="https://www.cam.ac.uk/">https://www.cam.ac.uk/</a></td>
</tr>
<tr>
<td>6</td>
<td>ciot</td>
<td>72</td>
<td><a href="https://www.caltech.edu/">https://www.caltech.edu/</a></td>
</tr>
<tr>
<td>7</td>
<td>prin</td>
<td>66</td>
<td><a href="https://www.princeton.edu/">https://www.princeton.edu/</a></td>
</tr>
<tr>
<td>8</td>
<td>calb</td>
<td>65</td>
<td><a href="https://www.berkeley.edu/">https://www.berkeley.edu/</a></td>
</tr>
<tr>
<td>9</td>
<td>colu</td>
<td>59</td>
<td><a href="https://www.columbia.edu/">https://www.columbia.edu/</a></td>
</tr>
<tr>
<td>10</td>
<td>chic</td>
<td>58</td>
<td><a href="https://www.uchicago.edu/">https://www.uchicago.edu/</a></td>
</tr>
</tbody>
</table>
3.3 FINDING IL COURSES BEING OFFERED THROUGH SEARCH

It now had to be decided how the relevant search queries were to be generated. This had to be done to ensure that the required information would have a high probability of being found. Previous research was used to identify the best search query generation methods (Weideman 2010a; Weideman 2010b).

3.3.1 A set of search queries were now constructed, ensuring that they were relevant, and therefore had a high probability of producing relevant and accurate search results. Two queries were highly likely to extract relevant results from the indices of the search engines being used:

- information literacy course (a “thick head” type query – short and general, which will have the effect of widening the focus, producing more results).
- generic university course on information literacy (a “long tail” type query, supplied as a string of separate but descriptive words) (Aliabadiab et al 2019).

3.3.2 Next, leading search engines were identified to be used during this research. It was found that Google, Bing and Yahoo! were considered to be the current leaders in the search engine world (Anonymous 2020; RapidAPI Staff 2019).

3.3.3 The queries were then executed on each one of the search engines and all the results were recorded. Therefore, a total of 60 website results were inspected (three search engines times two search queries each times 10 results per page), and only the first SERP (10 results) of each search was inspected.

3.3.4 Results were then summarized.

4 RESULTS

The results of all the searches are summarized in Table 5. Most of the results are listed as “NF” – Not Found. To make the summary in Table 5 easier to read, colours were used: green = a “best” result (there were none), yellow = a “good” result, red = a “bad” result.

Table 5: Search results.

<table>
<thead>
<tr>
<th>RANK</th>
<th>UNI</th>
<th>RESULT of HOMEPAGE</th>
<th>RESULT of LIBRARY PAGE</th>
<th>RESULT of HOMEPAGE</th>
<th>RESULT of LIBRARY PAGE</th>
<th>RESULT of HOMEPAGE</th>
<th>RESULT of LIBRARY PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>stan</td>
<td>NF</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
</tr>
<tr>
<td>2</td>
<td>harv</td>
<td>NF</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
</tr>
<tr>
<td>3</td>
<td>uni</td>
<td>NF</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
</tr>
<tr>
<td>4</td>
<td>olsd</td>
<td>NF</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
</tr>
<tr>
<td>5</td>
<td>comb</td>
<td>NF</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
</tr>
<tr>
<td>6</td>
<td>cmu</td>
<td>NF</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
</tr>
<tr>
<td>7</td>
<td>psu</td>
<td>NF</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
</tr>
<tr>
<td>8</td>
<td>colt</td>
<td>NF</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
</tr>
<tr>
<td>9</td>
<td>odu</td>
<td>NF</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
</tr>
<tr>
<td>10</td>
<td>uncw</td>
<td>NF</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
<td>*1</td>
<td>NF</td>
</tr>
</tbody>
</table>

NF = Not Found

1. Many IL-related news items and other links were found, but none in the first 10 links to Info or materials of a generic IL course being offered.
2. This university has multiple libraries, but no single landing page for all libraries was found - no searching was done.
3. The portal library webpage could not be found as a link or menu option on the homepage - searching had to be done to identify it.

5 CONCLUSION and RECOMMENDATIONS

Some conclusions are evident from the findings of Table 5. These include, for the top 10 universities in the world:

5.1 IL courses are generally not listed on university websites.
5.2 Even when using the website “search” function, the name(s) of these courses were not listed on the website.
5.3 Finally, when inspecting the library landing pages, no evidence could be found of any listings of these courses.
These results seem to indicate that a lot is left to be desired in terms of the general visibility of IL courses at the top universities of the world. It is recommended that the visibility of IL courses be improved, using one or more of many possible schemes:

5.4 Provide a single text-only webpage on the university website, containing the titles and detail of all IL – and related courses offered at that university.

5.5 Apply all the basic SEO principles to this page, before submitting it to the search engines.

5.6 Ensure that all PDF documents have their meta-data fields completed, that they have been given SEO-friendly filenames, and that they are searchable PDF files.

5.7 Ensure that all websites have an XML sitemap, and that their URLs have been submitted to Google and Bing.

5.8 Make use of the paid advertising schemes of top search engines (like PPC for Google).

6 FURTHER RESEARCH
This research project could be expanded to include some variations, making the results even more accurate.

6.1 Include more universities from the global top rankings.

6.2 Generate new and more specific search queries to improve the retrieval efficiency.

6.3 Add more popular search engines (for example: Baidu, Yandex and DuckDuckGo) to the current list of three search engines.

6.4 Include courses other than only IL courses in the study.

7 LITERATURE


MEDIA AND INFORMATION LITERACY MOVEMENTS IN BANGLADESH: A STUDY

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ABSTRACT

Media and Information Literacy (MIL) is at the heart of freedom of speech and information, as it empowers people to recognize the role of the media and other providers of information, to critically analyze their content, and to make rational decisions as consumers and producers of information and media content. The present study focuses on MIL initiatives taken by different stakeholders in Bangladesh.

This article also highlights the challenges faced by library and information science (LIS) professionals in promoting media and information literacy in Bangladesh. It also brings up some suggestions for organizing more MIL events for the young generation in Bangladesh.

Key words: Media and Information Literacy; Lifelong Learning; Library and Information Science Professionals, Private Universities; Bangladesh

PROLOGUE:

Bangladesh has achieved notable advancement in recent times in the fields of economic development, education, human resource development, empowerment of its people, especially women and other disadvantaged groups. The current population of Bangladesh is 165.39 million as of Monday, December 7, 2020, based on Worldometer elaboration of the latest United Nations data. The population of Bangladesh is equivalent to 2.11% of the total world population. Bangladesh ranks number 8 in the list of countries (and dependencies) by population and the median age in Bangladesh is 27.6 years. The literacy rate for people aged 15 and above stands at 73.9 percent, shows Bangladesh Sample Vital Statistics 2018 released by Bangladesh Bureau of Statistics in May 2019. DataReportal reported that there were 66.44 million internet users in Bangladesh in January 2020. The number of internet users in Bangladesh increased by 5.8 million between 2019 and 2020. Internet penetration in Bangladesh stood at 41% in January 2020. DataReportal also reported that Social media users in Bangladesh: There were 36.00 million social media users in Bangladesh in January 2020. The number of social media users in Bangladesh increased by three million between April 2019 and January 2020. However, because of low level of awareness among the general people, many individuals particularly youngsters go to online networks to understand their general surroundings without much preparation and background information.

The government of Bangladesh embraced the National Education Policy 2010 which put particular focus on lifelong learning. The premise of lifelong learning is framed by media and information literacy (MIL) which is deemed an effective weapon for all educational levels. A survey conducted by SACMID in 2018 found that most secondary school students use mobile phones and have access to social media and about 55 percent of them use Facebook as their medium for getting news. This survey recommended to integrate media literacy in the school curriculum.

Libraries are now changing their position from stewards of conventional information services to providers of digital information resources that are service-oriented. Professionals from the library and information science (LIS) focus on media and information literacy. In particular, the spread of information and media literacy in our community is being actively pursued by LIS practitioners.
and journalists. Nevertheless, it is very difficult to raise awareness of the value of media and information literacy.

IL AND MIL INITIATIVES IN BANGLADESH:
The concept of Media and Information Literacy (MIL) is not new in Bangladesh. MIL is as an integrated term promoted by UNESCO, which has been helping information seekers to become critical thinkers and independent lifelong learners. In Bangladesh, LIS professionals are trying to develop MIL amongst their patrons. Various types of workshops, seminars, and training programs on information literacy (IL), health information literacy (HIL), media and information literacy (MIL) have been organized since the last few years such as:

- International Workshop on Information Literacy, organized by Independent University, Bangladesh (IUB), from 22-26 June 2009, sponsored by International Federation of Library Associations and Institutions (IFLA).
- Workshop on Information Literacy, organized by East West University, Bangladesh from 5-6 January 2010, sponsored by International network for the availability of scientific publications (INASP).
- A two-day training course on Information Literacy and UN Literacy jointly organized by the Centre for Information Studies, Bangladesh (CIS, B) and United Nations Information Centre (UNIC), Dhaka, for the students of Haji Md Ekhsas Uddin Bhuiyan School at Ekhsasnagar in Rupganj, Narayanganj (south of Dhaka) in 2010.
- Workshop on Information Literacy, organized by East West University, Bangladesh from 5-6 January 2010, sponsored by International network for the availability of scientific publications (INASP).
- Centre for Information Studies Bangladesh (CIS, B) conducted another training program on Information Literacy from 23-24 January 2010 at Ratanpur Abdullah High School, Nabinagar, Brahmanbaria.

A Seminar on media and information literacy was jointly organized by East West University and University of Rajshahi, Bangladesh on 13 December 2010 at Rajshahi.

International Workshop on Health Information Literacy (1st Phase), organized by East West University from 27-30 July 2011, sponsored by IFLA.

International Workshop on Health Information Literacy (2nd Phase), organized by East West University from 12-13 February 2012, sponsored by IFLA.

International Workshop on Health Information Literacy (3rd Phase), organized by East West University on 20 July 2012, sponsored by IFLA.

As access to information, information and communication technologies (ICTs) and culture are essential prerequisites for sustainable development. So, Bangladesh Institute for Information Literacy and Sustainable Development (BIILSD) established in 2019, is dedicated to ensuring advocacy with stakeholders to solve their varying queries and understand their needs pertinent to these prerequisites. BIILSD has been conducting diversified MIL programs for the youth. In 2020, Youth Information Literacy Workshop 2020 were organized by BIILSD at Barguna and Jaintapur.

East West University and BRAC University, two leading private universities of the country have their own IL policy, course modules and standards. Some private universities including Eastern University are trying to develop IL policy. The BRAC University has a regular English Programme for the students of the university and the university has incorporated IL course with the English programme. This course is credit bearing (Dilara, 2014). EWU Library conducts Information Literacy program round the year for students since 2013 and for faculty members.
The main objective of this program is to develop essential skills among students for working in the information society. Old and new students can register themselves through online registration form available in library website. Information Literacy program is mandatory for the students for their library membership. Islam and Ahmed (2011) developed a course curriculum on IL for the secondary school students of Bangladesh. This was a good effort and proved effective. As a part of her PhD thesis, Dilara (2014) has develop a course IL curricula in the name of Information Literacy Curriculum for Undergraduates of 1st to 4th Year of Private Universities of Bangladesh. This curriculum may be used for South Asian countries. There are non-standard community information literacy programs in Bangladesh for different target groups, such as Community Information Services (CIS) through The Dhaka Ahsania Mission (DAM), Development Research Network (D.Net), Community Development Library (CDL), Grameen Phone Community Information Center and other different organization (Islam and Islam, 2010). United Nations Information Centre (UNIC), Dhaka also is also related with UN literacy centered activities.

EAST WEST UNIVERSITY: A FORERUNNER FOR THE PROMOTION OF MIL AMONG YOUNG GENERATION:
The Department of Information Studies and Library Management, East West University has been celebrating Global Media and Information Literacy (MIL) week since 2017. Recently, as part of the week-long programs to celebrate the Global Media and Information Literacy Week 2020, the Department organized a webinar on “Resisting Disinfodemic: Media and Information Literacy for everyone and by everyone” on 31 October 2020. The Guest Speakers of the webinar were Dr. M Aslam Alam, Chairman, Bangladesh Institute for Information Literacy and Sustainable Development & Former Senior Secretary to the Government of Bangladesh and Professor Dr. Jagtar Singh, Former Dean, Faculty of Education and Information Science, Punjabi University, Patiala, India. Dr. Dilara Begum, Associate Professor and Chairperson, Department of Information Studies and Library Management chaired the webinar. A Souvenir was published on the occasion of observing the eighth annual Global MIL Week 2020.

OTHER SIDE OF THE FENCE:
As a developing country, in Bangladesh, there is still a lack of professional and management level awareness of developing strategies for MIL education and also a severe lack of MIL policy guidelines, standards and generic literacy module, training and teaching materials in academic institutions. All academic institutions including schools, colleges and universities should include MIL in their regular curriculum library and information science, and journalism and mass communication departments should conduct these courses so that students can attain in-depth knowledge on media and information literacy. The proper knowledge dissemination methods should be strengthened and more new and evolving technologies should be applied in the sector. Standard curricula of MIL considering different levels of citizens should be developed that can be followed nationally in academic institutions and libraries. Proactive leaders should engage for designing diversified activities of MIL for the youth. Under this circumstance, the rising leaders should practice 21st century skills. According to the Glossary of Education Reform (2016) the “21st century skills” concept encompasses a wide-ranging and amorphous body of knowledge and skills that is not easy to define and that has not been officially codified or categorized”. Library leaders need to be more assertive, and they need to scale up their social skills, move out of their comfort zones to network within and outside the library workforce. LIS professionals need to build collaborative partnerships and consortia with other stakeholders for promoting MIL. Besides, LIS professional should take part in capacity building activities and training programs so that they can equip themselves with knowledge and practical insights about MIL. More seminars, workshops, webinars, etc. should be arranged for patrons. LIS professionals
need to build working relationship with the government authority and lobby within their institutions and government circles with regard to MIL activities. The government must take an active role in promoting media and information literacy. It should take initiatives for setting up well-equipped libraries and other information institutions. Hence, a proactive role from the government is imperative to promote media and information literacy in Bangladesh.

CONCLUSION:
It is evident from the above scrutiny that MIL is moving up, gaining popularity and acceptance. Now, Bangladesh can only accelerate MIL programs and extend their benefits to its socio-economic department by preparing a national MIL program on a sound and practical basis, along with national and foreign resources and services. Besides, to make people informed and aware of MIL and its importance, a comprehensive awareness-raising campaign should be launched in Bangladesh.

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IMPROVING INFORMATION LITERACY IN HIGHER EDUCATION IN AN UNORTHODOX WAY: THE LITERATURE POTENTIAL FOR ACRL FRAMEWORK APPLICATION

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ABSTRACT

The implementation of the ACRL Framework has been a challenge for higher education librarians. This study proposes an unconventional way of adopting the opportunities of literary reading to teach the six conceptual frames recommended by this guiding document. From a literature review on the importance that literary reading has in the individual’s life as well as the experiences of higher education libraries in the promotion of literary reading, a reflection emerges on the opportunity to teach information skills in this context. The main objective of this work is to make a creative and innovative contribution to the practical and situated application of the ACRL Framework in a non-traditional context, exploring literary reading to explain concepts, dispositions, and practices. For each conceptual frame are listed examples and situated learning strategies, which can contribute to the acquisition of essential and structuring instruments of the mechanisms necessary for information skills. Regarding specifically reading comprehension, it is important to work on the ability to extract relevant information from written texts so that it becomes a powerful tool for obtaining and processing information, transversal learning, and social insertion and is not reduced to school learning, but reveals its potential in extra-scholarly contexts, such as reading groups, meetings with authors, or the constitution of specific collections for leisure reading in university libraries.

Keywords: Information Literacy, Higher Education, Leisure Reading, Reading Development, ACRL Framework, Literature, Literacy, Information Literacy Teaching and Learning

“We all read ourselves and the world around us so that we can see what we are and where we are. We read to understand, or to begin to understand. We have no choice but to read. Reading, almost as much as breathing, is our essential function.” (Chartier & Cavallo, 1998, p.143).

1. INTRODUCTION

We know that student-centered learning requires the significant use of available learning resources, based on printed, digital, multimedia, or other information. Therefore, the main objectives when considering the development of information literacy skills are to improve the way of handling information in multiple media, to enable higher education students in the correct and ethical use of information in different contexts, and also to make it learning functions both in the classroom and throughout life. Potentially, this will impact in his personal and social development, in educational success, in the formation of personality, in autonomy, in his way of being and understanding his insertion space.

Librarians are urged to learn about the emerging pedagogical changes that they can take advantage of to design their courses, integrating this knowledge into a more segmented, clear, and objective training offer, and based on international references, such as the Framework for Information Literacy for Higher Education (ACRL, 2016). This can be understood as a tool that mirrors a spectrum of mental skills, practices, and habits that broaden and deepen learning...
through engagement with the information ecosystem. The new Framework renews the concept of information literacy, defining it as a set of integrated skills that link the reflexive discovery of information, the understanding of how information is produced and valued, as well as the use of information in the creation of new knowledge, and ethical participation in learning communities. The approach to the application of the Framework has been explored by some scholars (Upson, O'Neil, & Colquhoun, 2017; Miller, 2018; Harden, 2019; Hendrigan, Mukunda, & Cukierman, 2020), proving to be challenging, but very opportune due to the flexible and potentiating form of deeper learning and related to the disciplinary contents. Nevertheless, is interesting to consider multiple contexts as opportunities to teach information literacy, particularly in the context of exploring literary works.

2. LEISURE READING IN ACTION

When we think of reading in the context of higher education institutions, we naturally associate this instrumental intention. It is for this reason that academic libraries seek to provide services and build collections based on this prerogative: read to learn, read to know, thus constituting libraries eminently specialized in curricular subjects. At the same time, enjoy reading is usually related to individual motivations, not exclusively related to the school or the schooling process. In this sense, public libraries have a reading mission that responds to this need, offering services and collections focused on leisure reading, while university libraries traditionally focus on and promote instrumental reading. For this reason, the teaching of Information Literacy has been linked to examples focused on the search for scientific and technical information and this has become the orthodox way of teaching these skills. Currently, we are witnessing the increasingly transversal recognition of the importance of reading, proposing the creation of a social environment favorable to the valorization of books, reading, and cultural and scientific experience, namely through public policies or corporate initiatives with social impact. The virtualization of how cultural goods and knowledge, in general, are accessed has been changing reading habits. The news that appears on the screen, through instant warnings, immediate access to email on the cell phone, social networks, hyperlinks, and the multimedia flood are a reality and some studies have pointed out that these influences change the way the brain processes the information (Carr, 2010; Wolf, 2018). For Wolf (2018), concerns about attention span, critical thinking, and overconfidence in technology should never be just about children. This researcher, when conducting a study on herself, found that although she is a reading expert her ability to read in-depth was affected as she became more dependent on digital. This circumstance worsened in 2020 with the limitations imposed by the pandemic COVID-19, leading to more people using, in more activities, the virtual means of access to information and communication, which has led to exhaustion and tiredness, already called zoom fatigue (Sklar, 2020). In the opinion of the NY Times columnist, Margaret Renkl (2020), there is now a desperate need to move away from the screens, combined with the need to slow down and dive not in the breaking news, but into the timelessness of the printed page. The opportunity is evident and the question is how can the importance of traditional reading in higher education be reinforced while teaching information literacy? Considering that it is possible to act on both lines, that is, on digital and printed documentation, we should, within the scope of university libraries, support electronic access to information, at the same time that we promote reading on paper, reinforcing the idea that strengthening the skills of concentration, memorization, and focus, through the deceleration of reading, will also include the literary reading of printed works (Elliott, 2007; Macadam, 1995). The importance of literary reading has had the attention of several authors and has given rise to wide-ranging interdisciplinary debates. Oatley (2016), in the scope of the cognitive sciences, referred that the reading of literary works can be thought of as a form of awareness of oneself and the other, allowing inner changes that are related to the reader's involvement with the story. According to the author, this happens because characters and complex circumstances in which
they find themselves are perceived through literary reading (not often found in real life). Thus, the reader can make inferences, establish emotional involvement, and increase the capacity for empathy, fundamental social skills. At the same time, literary reading contributes to the increase of social and cultural capital, constituting itself as an intangible asset for the individual. For university libraries, being aware of this can help find good opportunities to teach information literacy across the board in teaching academic skills.

2.1. Impact of leisure reading on academic skills

Academic skills must be understood as a set of personal and interpersonal skills, particularly relevant in the context of higher education. To pursue their goals, students develop several generic skills such as personal organization and time management, communication, conflict resolution or ethical behavior, but also specific skills essential to the production and communication of academic and scientific research work, such as critical thinking, planning and knowledge and application of research methods, and scientific writing and dissemination techniques (Garrido & Prada, 2016). The development of these skills adds greater autonomy, capacity for self-regulation, and adaptation to the student, benefiting their learning and allowing intellectual growth and updating, thus promoting academic success. In addition to these academic skills required in higher education, reading and writing are fundamental skills, since, being transversal to the entire disciplinary spectrum, they consolidate and legitimate learning (Levya, 2015). Reading, in particular, involves complex cognitive processes, including the narrative capacity, that is, to understand the thread of a story and, when it is shared, it is associated with orality. Narrative and oral skills are, therefore, at stake at the same time, whenever a literary reading is shared (Macadam, 1995). It is therefore pertinent to consider literary reading as a significant contribution to the development of the academic competences of higher education students. This idea has been affirmed by several authors (Macadam, 1995; Tabackova, 2015; Levya, 2015, 2015a; Douglas, Barnett, Poletti, Seaboyer, & Kennedy, 2016), who are unanimous in describing the reading, which corresponds to a higher-order reasoning ability, as the basis for critical thinking. The authors affirm that the exercise of reading will equip students in the long term, allowing them to acquire knowledge and skills that can be applied throughout their lives, still being preponderant support in the development of academic writing.

Another important idea is that reading proficiency is particularly determined by the pleasure given to the reading experience (Smith & Young, 2008; Gilbert & Fister, 2011). This is a fundamental clue for teachers and librarians who work with young people in training, particularly as reading promoters. In other words, if we want students to be lifelong readers, it is necessary to provide meaningful monitoring of learning, but it is also important to consider ways to help them develop their tastes. In this sense, the choices of the readings that provide greater satisfaction can be made autonomously or oriented but should be based on broadband of options. This aim opens space for the diversity of readings in the academic environment, removing all the role of instrumental reading and enhancing access to new ways of reading and knowing, namely through the constitution of collections of literature, the foment of reading groups, or the meeting with writers and other authors. In this way spaces will be opened to think and learn critically, cultivating tastes, fostering encounters and dialogue between all members of the academic community, and providing opportunities for leisure reading, while cultivating and developing skills transversal academic institutions.

2.2. Academic Libraries Supporting Leisure Reading

Higher education libraries assume a transversal role in the promotion of academic skills, either through their teaching and research support functions, or through the core functions of guarding, preserving and disseminating collections and resources. Literature-related collections are not always a priority investment, but result in opportunities to connect the community, broaden
students' cultural horizons and implement strategies to foster recreational reading (Dewan, 2010). Further, according to Mahaffy (2009, p. 164), “The practice of pleasure reading develops skill sets that support academic learning. When academic libraries reach out to their communities to promote a culture of reading, both the institution and the community will benefit.”

In Portugal, the national strategy in force around reading is the National Reading Plan 2017-2027 (PNL, 2017). This is a public policy whose main purposes are to increase the reading practices and habits of the Portuguese population and improve their reading and literacy skills. In one of its issues, the Ler + no Superior [More reading in Higher Education] defines a strategy to give impetus to reading in Higher Education, based on an attitude of curiosity and adventure, creativity and openness to knowledge and the world, and promotion of the pleasure for the book – both for teachers and students. At the same time, at an Ibero-American level, the National Reading Plan 2027 has been collaborating with the Red de Universidades Lectoras [Reading Universities Network] (RIUL, 2020) since 2018. RIUL emerged in November 2006, with the aim of enhancing the role of reading and writing at the University, not only as work tools, the so-called academic literacy, but also as a vehicle for the integral promotion of the university community. Currently, the Network has the support of 46 universities that propose several common activities - symposia, meetings, exhibitions, publications, creating environments conducive to reading and writing in the university environment.

In this context, it is natural to consider the contribution of academic libraries as part of a broader strategy to promote reading among university students. Libraries can assume and must advocate, among others, three ways of promoting reading:
- the constitution of specific collections for leisure reading in university libraries;
- the promotion of meetings with authors;
- the implementation of reading groups

In an exploratory analysis, it appears that there are already some academic libraries in Portugal that gather literary book collections just for leisure. This is the case of the ISPA library - University Institute, specialized in Psychology, the Polytechnic Institute of Leiria, and the Instituto de Educação da Universidade de Lisboa.

ISPA’s academic library (http://cd.ispa.pt/) serves as a hub for reading and literacy activities. It has collections of literature and promotes meetings with writers, in a regular initiative called "The Pleasure of Reading". This is a meeting place for readers, authors, students, editors, booksellers and librarians in the form of a forum on reading. It is a multifaceted event with book launches, conversations around the books and small book exhibitions and exhibitions in the academic library. Within the framework of this initiative is explained: “A book is an open window beyond the reader. An infinite discovery of others and, in this way, of ourselves. For this reason, only illusory, a book is a solitary pleasure. Books are a powerful myth. These are the minutes of our accumulated knowledge, which we ambitiously seek to recover. But as their number exceeds our capacities and our available time, we are left with the persistent task of electing those who will deserve our attention. This task stimulates our appetite and feeds the irreplaceable pleasure of reading, of reading continuously, like an endless journey” (Lopes, 2002). Additionally, in the Academic Competences discipline of the same Institute, 10 minutes of reading are used at the beginning of each class named by “The pleasure of reading in the classroom”. This initiative is part of the LER + program and aims to raise awareness of the importance of reading as an instrument of thought and written creation. Still in an experimental way, students are being asked some questions about habits, motivations and reflections on reading in Higher Education, which results are intended to be presented in future studies.

The Leiria Polytechnic Libraries (https://www.ipleiria.pt/sdoc/) have stimulated leisure reading among their community, at the same time that they seek to create skills for information literacy. To achieve these goals, they elaborate several strategies that, according to internal evaluation, are fulfilling the objectives. One of these initiatives, entitled "Varanda Literária" [Literary Balcony]
consists of an exhibition space, associated with a literary collection, where decorations related
with the various themes are made: food day, World book day, Autumn, Christmas, Halloween,
holidays, summer, among others. Several strategies were used to enrich this book collection:
creation of a flyer to suggest the acquisition of books by readers; bi-monthly interviews “Shall we
talk about Libraries?” where respondents, among other issues, identify the books that marked
them and why, these being acquired; acquisition of national and international new book releases
in Portuguese and English, also reminding international students; collecting suggestions for
acquisition among library staff, thus making it an easier method to encourage reading a book that
also marked them; and request to national publishers to offer titles.
At the Institute of Education, in the University of Lisbon, the library (http://www.ie.ulisboa.pt/
biblioteca) manages a reading group: Duas de Letra - Readers Group, which started in February
2016. Open to students, teachers, researchers and non-teaching staff, it sought to build, around
the reading of fruition, a space for meeting and dialogue between all members of the community. The
exercise of the habit of thinking and learning outside the classroom context, with the expression
of one's own ideas and the respect and appreciation of the ideas of others, was also an
accomplished purpose (Matos & Sanches, 2017). As already mentioned, some literature confirms
that reading groups are important contributors to the development and consolidation of
competences in Higher Education. Eckel, Kezar and Lieberman (2000, p. 91) stated “Reading
groups build on highly developed academic strengths, such as inquiry, focused thought, writing,
and contemplation, to advance institutional goals”. The National Endowment for the Arts (2007,
p. 68) also underlines the same idea when it finds that “Reading for pleasure correlates strongly
with academic achievement”. In Portugal reading groups are still an incipient initiative, but they
are beginning to assert themselves.

3. TEACHING INFORMATION LITERACY
In 2000, the American Library Association (ALA, 2000), through its Association of College and
Research Libraries section, defined this concept, explaining that a trained individual with
information skills must be able to determine the need for information and its extension, access
information efficiently and effectively, evaluate information and its sources critically, incorporate
selected information into your knowledge base, use information effectively to fulfill a specific
objective, understand the economic, legal and social implications around of using information and
knowing how to access and use it ethically and legally. Later, in 2016, the Framework for
Information Literacy for Higher Education emerged, the product of an intense work of
reconceptualization of contents and competencies and issued by the Association of College and
Research Libraries (ACRL, 2016). This Framework defines information literacy as a standard of
integrated competencies that include the reflexive discovery of information, the understanding
of how information is produced and valued, and the use of information in the ethical and legal
creation of new knowledge. In summary, the Framework articulates three interconnected axes -
the theorizing of six conceptual areas, the identification of knowledge practices, and the advocacy
of attitudinal dispositions to act in the information ecosystem.
The first results of applying this conceptual tool are already visible. In the study by Lathan, Gross,
and Julien (2019), the authors report that the most successful strategies for implementing the
Framework, declared by the participants, related to their presentation to other librarians and
teachers across the campus, and their attempts to adapt and reconfigure the information
knowledge that this tool represents. Since it is much more conceptual, not being able to be given
in brief initial sessions, the recommendation is that the concepts it advocates be embedded in
learning throughout the year. The new Framework supports an expected metamorphosis given the
need to align existing references with the current process of creating and using information, and
presents a set of frames (conceptual frames) or interconnected main concepts, representing
comprehensive ideas that are intended to apply to many academic disciplines (ACRL, 2016; Fisher, 2017; Swanson, 2017), namely:

- Authority Is Constructed and Contextual
- Information Creation as a Process
- Information Has Value
- Research as Inquiry
- Scholarship as Conversation
- Searching as Strategic Exploration

Each of these conceptual frames includes a knowledge practice section used to demonstrate how the mastery of the concept leads to its application in new situations and the creation of more knowledge; also includes a set of dispositions that work the know-how in the learning process.

4. METHODOLOGY

This study is based on a theoretical reflection based on the literature review and seeks to highlight the flexible essence of this new pedagogical tool. To this end, it describes and explains, from each of the proposed conceptual frames, which are the significant interceptions between the Framework and Literary Reading, inspiring librarians to act to ensure their application, through the management of literary collections, of the meetings with writers or promoting reading groups, thus contributing to the construction of transversal competences in Higher Education.

5. RESULTS: INTERCEPTION OF LITERARY READING PROMOTION PRACTICES WITH INFORMATION LITERACY

The analysis of literary reading promotion practices developed in an academic context points to a relationship between information literacy and the skills associated with it. The new Framework suggests a different approach in order to integrate information literacy training in different contexts, highlighting knowledge and understanding about the acquisition of specific skills. The new Framework is also more flexible for teaching information literacy. With the different approaches to promoting literary reading, often mixing leisure and critical thinking, with experiences based on practices, this flexibility has significant advantages. The results are presented below in a table, which are then clarified in the further explanation of each conceptual frame.

Table 1. Interceptions of Literary Reading Promotion Practices with ACRL Framework Concepts

<table>
<thead>
<tr>
<th>Six Threshold Concepts anchoring the New Framework for Information Literacy (2016)</th>
<th>Literary Reading Promoting Practices examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Authority is Constructed and Contextual</td>
<td>The meeting with a writer, illustrator, or other personality</td>
</tr>
<tr>
<td>2. Information Creation as a Process</td>
<td>Reading group; debate</td>
</tr>
<tr>
<td>3. Information has Value</td>
<td>Literary Book Collection; Reading group;</td>
</tr>
<tr>
<td>4. Research as Inquiry</td>
<td>Shared literary reading; Reading group</td>
</tr>
<tr>
<td>5. Scholarship is a Conversation</td>
<td>Literary reading moments; Reading in Class /Reading Groups</td>
</tr>
<tr>
<td>6. Searching as Strategic Exploration</td>
<td>Literary Book Collections; Shared literary reading</td>
</tr>
</tbody>
</table>

5.1. Authority Is Constructed and Contextual

Whatever the document at hand, it is important to question the source, the context, and the adequacy. In this context, the idea that all sources of information have an author is emphasized,
who due to his reputation, experience or status attributes or not credibility to the information. Information based on the concept of authority is, therefore, derived from an authorial purpose and context, with the exception that some information is more useful than others, depending on the information that is needed (ACRL, 2016). The alignment of pedagogical objectives for this first conceptual framework can be made from a set of premises that frame the activity of meeting with the writer. As an activity to promote reading and writing, the meeting with a writer, illustrator, or other personality (researcher, scientist) in an academic library must be planned with the necessary advance and be part of a small educational project, involving, for example, the reading of a work or part of a work, writing activities resulting from that reading, research activities (namely about the author's life and work, in different information sources), and the promotion and incentive to extracurricular academic works that can assume a multidisciplinary and more creative character (exhibition, article for the academic journal, bookmark). On the day of the session, there can be spontaneous interventions and free debate. This exploratory contact enhances the author's contextual knowledge, opening space for the explanation of the concept of authority.

5.2. Information Creation as a Process
Understanding that the creation of information is a process implies envisaging the incorporation of activities, tasks, and learning assessments that require the articulation of information needs; finding information and resources in digital environments; the organization, processing, analysis, and interpretation of information; and the comparison and critical evaluation of the credibility and reliability of the information and its sources. It also implies the understanding that this whole process is underlying when looking at a final product: a scientific journal, an article, a book. An opportunity that can be created, from literary exploration, to understand this second conceptual framework is the activity of reading groups. In these, the debate on literary works can broaden and go beyond the work itself, for example, the creative process can be talked about. It will be interesting to have a good diversity of books to support the session, to introduce books with discordant proposals concerning the reflections that each participant presents, opening discussion and group reflection, broadening the concept of reading. Even outside the context of a reading group, this activity can be promoted, using the documentary background of the library, for example from historical novels, addressing the theme of fiction and non-fiction, of building publications from credible sources and, in academic terms, what should be the criteria in this information creation process.

5.3. Information Has Value
The value of information is largely subjective and associated with the needs of each user and is related to the perception of the real or potential benefit. Thus, the information has a value attributed to it by those who market it or make it freely available, albeit at a cost to the end-user, but it contains a greater or lesser intrinsic value depending on the end-user and what he obtains as a result. Still, in a literary context, it is possible to debate the importance of literary awards for the lives of writers. What criteria will be used by juries to determine, measure, or express the social value of a particular work, to support a decision to award a prize? How does the allocation of financing or access to creative grants affect production? How does access to other literature affect your position and quality as a writer? And Libraries, how do they play their part in the information value cycle? These and other issues can be debated in contexts of information literacy training, seeking to bring students closer to realities that may be more familiar to them. The physical collections of literary works from libraries can create a good basis for discussion about the value associated with information.
5.4. Research as Inquiry
The investigation is iterative and will depend not only on a process of trial and error but also on increasingly complex questions that arise from this process and whose answers develop new questions or lines of research in any area of knowledge (ACRL, 2016). Shared literary reading, particularly in reading groups, fosters literacy, critical thinking, helps curb the decline in reading habits, and increases the ability to concentrate and contemplate, while stimulating the mind, and spirit, and students' imagination (Dewan, 2010). Levya (2015a) converges to these same arguments when stating that leisure reading is a predictor of higher academic performance, generating students with a more comprehensive and consistent learning capacity, as it combines more lexicon and more referential benefits. At the same time, already established readers have a positive predisposition for academic learning, which is done significantly through reading, as this allows access to more knowledge, constituting the basis for challenging, interesting, meaningful, and even exciting experiences. Therefore, each group facilitator has scope to create, through the direct relationship with the group, renewed readings, uniting interpretations, and establishing the relationships between the various moments in a fluid way. It is also important, and whenever possible, to allow each participant at the end of the session to return to the book, stimulating their mind from new questions, to return to reading the text, supported or not by the group that accompanies it.

5.5. Scholarship as Conversation
The idea behind this conceptual framework gives the production of academic results a commitment to the community (ACRL, 2016), that is, the academy is permanently involved in new contributions and discoveries, giving the academic environment space for dialogue where ideas they are formulated and discussed. Academic writing itself is the result of an asynchronous dialogue, where each author interacts with what others have said and written before them, being relevant that this dialogue is visible to readers, through the correct and adequate citation and referencing. In the case of literary reading (in class or in the reading groups), this premise can be observed through intertextuality, that is, the appearance of cross-references in a book that refers to characters, contexts, or actions in other books. The verification of the existence of these literary writing mechanisms demonstrates respectful, welcoming, and inclusive practices in the written construction. This is an opportunity to talk about plagiarism, quotation, and reference, but at the same time to discuss collaboration and cooperation. These seem to be the best ways for a researcher to balance the competition with his peers and, for that, it is necessary to find the most effective, collaborative, and collective way of acting, which forms the much-needed dialogue platform in the academic context.

5.6. Searching as Strategic Exploration
Finding the information requires a combination of research, discovery, and some luck, which are gained and refined through experience. The competencies recommended here, therefore, go through the work of knowledge that is increasingly deepened in information resources that make it possible to search for information, training the capacities to locate, select, retrieve and evaluate information, using a variety of sources and tools (printed and electronic), discerning between academic and non-academic sources, between primary and secondary sources, compiling, categorizing and managing citations during the information search process, applying an ethical and legal standard in the use of sources and information, and critically evaluating the sources and information resources, which should be strategically applied previously and continuously to the academic writing process. And what opportunity can be given from literary collections in academic libraries? A documentary background built with coherence, diversity, technically well described and containing good keywords can be the basis for exploring and discovering
interesting and meaningful information, even if it is not directly linked to the purpose of the Research.

6. CONCLUSION
Higher Education is a complex, demanding, and challenging environment. Students play an important role in creating new knowledge, in understanding the contours and dynamics of the information ecosystem, as well as in the ethical and legal use of scientific information and data. Information professionals, in turn, can contribute to the identification of the great ideas of knowledge and the learning of students. They are the great drivers of the creation of a new curriculum, oriented towards the skills of information literacy in collaboration with teachers. These information literacy programs aim to be developed, implemented, reflected, and revised both in libraries (informal learning) and integrated into academic curricula (formal learning). The ACRL Framework is a reference document in which information professionals and teachers find inspiration and support. It is also useful for the development of knowledge infrastructures, including systems and services that actively support students and researchers in their close contact with information, communication, and knowledge sharing. The present study sought to demonstrate the practical application of the Framework, through the unorthodox example in which the information is transversally applied to literary reading promotion practices. Despite focusing on examples, the authors believe that this exercise can inspire others - teachers and information professionals - in teaching information skills. Information literacy must be a well-founded practice that ultimately does not limit the fulfillment of the thematic content of academic programs, but that encourages self-learning processes by both students and teachers. This is a task with ethical, cultural, and social consequences, with the educational foundations that students need to be self-reliant and that is why any contexts can be important learning opportunities.

7. LITERATURE


PRACTICE WHAT WE PREACH: 
STRENGTHENING THE LIBRARIAN’S REFERENCING COMPETENCIES IN TEACHING INFORMATION LITERACY

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ABSTRACT
The Nazarbayev University Library is committed to re-tooling librarians and specifically its subject librarians (SL) to enhance their competencies in teaching Information Literacy (IL). Collegial support and mentoring is needed to ensure everyone is informed with the new trends and development in IL. With occasional turn-over of library staff, the challenge is to train novice professionals for uninterrupted services. IL modules are currently in place yet there is a need for constant updating to ensure the quality of IL teaching. A review of IL frameworks is needed to provide them with a good foundation. IL supports academic integrity and it should be discussed in the schools and universities as early as possible. This paper will explore the current status of librarians in terms of their working knowledge in referencing and related academic integrity aspects as part of the research process. Professional development programs are constantly developed to strengthen the competencies of librarians. Better library research support will happen if librarians are equipped with the right knowledge and skills.

Key words: Competency assessment; Mentoring; Referencing; Professional development; Subject librarians; Liaison librarians; Kazakhstan

1. INTRODUCTION
Collegial support and mentoring is needed to ensure everyone is informed and no one is left behind with the new trends and development in Information Literacy (IL). As what professional development suggests in relation to career growth, an information exchange among librarians builds interdisciplinary knowledge (Miller, 2011). With occasional turn-over of library staff, the challenge is to train novice professionals for uninterrupted services. IL modules are currently in place yet there is a need for constant updating to ensure the quality of IL teaching. More so, the current scenario of Kazakh librarianship is still developing and needs proper guidance and attention. This paper focuses on the knowledge gained by the subject librarians during several IL workshops conducted for beginner and intermediate librarians and how they were able to apply it in practice particularly the knowledge gained on referencing and academic integrity.

Several studies concerning academic integrity were spearheaded by librarians in Kazakhstan. Subject or liaison librarians who are concerned with citation, copyright, and plagiarism collaborate to solve a problem. At Nazarbayev University Library, they are a mix of locals and foreigners. This research culture strategy can be seen as a professional development endeavor as they learn from each other -- from data curation to interpretation of results. The research culture of librarians in Kazakhstan was motivated by the lack of mentors and in itself helps the local librarians gain research knowledge among peers. In 2017, Alenzuela, Groen, Kamilova, Terzi&Zvonareva described library initiatives in supporting academic integrity through faculty collaboration offering library sessions on proper citations and avoiding plagiarism. The Annual Conference on Academic Integrity jointly organized by M. Narikbayev KAZGUU University Higher School of Economics and Nazarbayev University give opportunities for librarians in Kazakhstan to share case study experiences and institutional practices. In 2018, Yap, Groen, Kamilova, Terzi&Zvonareva published a research work indicating referencing errors committed by graduate students in their theses. The librarians show interest in doing studies related to academic integrity. For instance, Zvonareva (2019) believes that libraries have a role in teaching students on avoiding plagiarism. She adds that libraries continue to rise above the challenges by conducting workshops in support of academic integrity. Yap (2019) addresses in his study that it is important to have an error free reference list. His study revealed common errors committed by
the students. As a result of the study, he created a LibGuide to avoid those mistakes that can be useful for the academic community.

2. OBJECTIVES OF THE STUDY
This paper investigates the knowledge of library personnel towards subject librarianship and information literacy. To assess their knowledge, activities were employed during calendared professional development programs. Continuing professional development is an opportunity for them to learn and relearn. In particular, this paper zooms into the competency of librarians. Subject librarians act as the mirror of the library as their role is to teach and instruct users. It is important to assess the gaps as early as possible. In particular, this study explores the current status of librarians in terms of their working knowledge in referencing and their understanding about plagiarism. Improper referencing is considered an act of plagiarism and violates academic integrity. It is not the aim of this paper to compare skills among librarians but to measure the readiness of each subject librarian in their line of work. Specifically, this research tested two batches of trainees to gauge their pre-existing knowledge on referencing particularly with the use of APA citation style (6th edition). This is the main citation format being used by the university and subject librarians are expected to be at least familiar with it. The release of APA 7th edition will also change the current practice in a year or so. In addition, another batch of trainees were tested based on their pre-existing plagiarism knowledge. These tests were done during the scheduled workshops to identify which areas need to be developed and improved.

3. REVIEW OF LITERATURE
3.1 Professional Development Training
A responsible professional development program invests in the training and knowledge acquisition of its staff members. Just like any library organization, librarians need strong support from its administration to continuously update their knowledge and skills. Staff development is defined as the:

process whereby employees of an organisation enhance their knowledge and skills in directions that are advantageous to their role in the organisation (Marriss, 2011, p.1).

Increasing the function of subject or liaison librarians (academic liaison librarians) may need extra training to prepare the demands of the role (Cooke et al., 2011). To recognize what the librarians need, a training needs analysis is conducted by Deakin University Library to assess and understand the professional development needs of liaison librarians (Robertson, 2018). Robertson (2018) figured out that for liaison librarians to be relevant, the training and development program of a library must be based on a theoretical understanding that builds competency. Using a skills/knowledge matrix, he used the self-determination theory to reveal the gaps in the current understanding of their job. Furthermore, as pointed out by Todorinova&Torrence (2014), incorporating assessments in a training program makes it more functional and successful.

3.2 Assessment of Librarians
Evaluating the work of peers can be done objectively. Each employee, librarian for this matter, has their own value. Performance evaluation is carried upon to measure the success of each individual and review the areas where they need to improve and how to deal with it. While performance evaluation is done to review the librarian’s work, it would also deem necessary to assess specific responsibilities of employees. In this case, they are the subject librarians. Often called liaison librarians, they are designated as subject specialists in each degree program. Miller (2014) studied subject librarians’ activities at Rollins College and surveyed faculty members to get their honest opinions about their liaison librarians. About 85% of the faculty were able to
identify their subject librarians correctly and this is the initial step to evaluate how liaison librarians were able to fulfill their work at the ground level. The subject librarians are the face of the library. They collaborate with their academic community and they must be readily equipped with all the necessary information and skills to effectively do their job.

4. METHODOLOGY
This descriptive research utilized existing data collected from workshop activities used to assess participants’ pre-existing knowledge of the subject. Two sets of assessments were done to analyze the current understanding of librarians about referencing and plagiarism. The first one is identifying the correct or incorrect referencing format applying APA 6th edition. The second is their understanding of the basic foundations of plagiarism and how to avoid it. The author handled several workshops related to Information Literacy (IL). The first IL workshop open for all the library staff was held last December 10, 2018. A more in-depth workshop was held last February 6-7, 2020 wherein a fifth of the staff were present (10/50). These training and professional development workshops were conducted to keep the librarians informed and updated. In addition, it was also a way for the instructional librarians to test the modules they created to our academic community. The sessions and workshops coordinator made sure each library department had a representative so that everyone is given the right amount of knowledge in case they are assigned with reference or subject librarian roles in the future. These workshops are more directly beneficial to subject librarians who provide teaching and instructional sessions.

Batch A (Referencing: Board of Errors)
Trainees of batch A were all subject librarians acting as liaisons to different schools of the university. These batch of trainees were all relatively new to their positions as subject librarians except for one expatriate librarian. All of them were given a clean slate even though they may have pre-existing knowledge on APA format from their past experiences. There are eight schools present yet three current subject librarians are part of the team who conducted the workshop.

<table>
<thead>
<tr>
<th>Subject Librarian</th>
<th>School</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1, 2, 3</td>
<td>Workshop provider</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>Workshop provider</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>Workshop provider</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>Trainee</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>Trainee</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>Trainee</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>Not present</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>Not present</td>
</tr>
</tbody>
</table>
Just like any other workshops, a lecture was first given for 1.5 hours per module. Each module has its own learning objectives and learning outcomes. These modules were modified to teach IL for librarians and not for students. The lecture gives them the opportunity to receive training certificates. The lecture consists of four modules and two of them highlight academic integrity which talks about plagiarism and the other module is on citation and referencing. Two sets of paper-based seat work were given for the subject librarians to identify the error/s in an APA reference list. The first set was given immediately after the lecture. Three weeks later, a retention check was done for the second time. For this purpose, only scores from the three subject librarians were analyzed.

Batch B (Avoiding Plagiarism)
A module on avoiding plagiarism was also part of the professional development plan. As repeatedly mentioned, this is one of the four modules of the Information Literacy program. An online quiz using Kahoot was developed to assess the pre-existing knowledge of the trainees. About 10 trainees were present. Having been part of the library workforce, it is expected that they already have knowledge about plagiarism. Each item was given ten seconds for all the participants to answer. There were ten items to be answered. To view the list of questions, see Appendix at the end of the study.

This study was reviewed by Nazarbayev University Institutional Research Ethics Committee (IREC) and granted exemption from IREC review on the basis that the study is using existing data.

### 5. RESULTS AND DISCUSSION

#### Board of Errors (n=3)

<table>
<thead>
<tr>
<th>Librarian</th>
<th>Educational Background</th>
<th>Years of experience (as of 2020)</th>
<th>First Attempt</th>
<th>Second Attempt</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Set</td>
<td>Score</td>
</tr>
<tr>
<td>A</td>
<td>No LIS education</td>
<td>3</td>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td>B</td>
<td>No LIS education</td>
<td>1</td>
<td>2</td>
<td>40%</td>
</tr>
<tr>
<td>C</td>
<td>With MLIS</td>
<td>9</td>
<td>2</td>
<td>60%</td>
</tr>
</tbody>
</table>

On an average, set 1 received 61.11% correct answers while set 2 is more difficult based on the trainees results with an average of only 40%. Librarian C is more knowledgeable with nine years of library experience. In addition, librarian C received a degree in library and information science which is an advantage on the part of the librarian.
The International Scientific Conference of Librarians  
Western Balkan Information and Media Literacy Conference 2020  
& 9th International Summit of Book

Actual Sets and Explanation

In set 1, there are six citations with more errors and only one item with no error. Each librarian was given ample time to review what is missing or what is wrong in each citation. All three librarians agreed that citation one in set one has no title source. They also agreed that citation six is correct and nothing is missing.

In set 2, there are five citations with very minimal errors or no error at all. Two of the sample citations have no error. All librarians correctly answered citation one with no error.

Set one was first given to Librarian A and set two was first given to librarians B and C. Their scores are fair enough as they just finished a lecture. The knowledge is fresh. But, still they received citation errors. Librarians A and B did not improve their citation practice in the second attempt since they received lower scores. Only librarian C received an improved score with no errors at the second attempt.

Avoiding Plagiarism (n=10)

<table>
<thead>
<tr>
<th>Librarian</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Q6</th>
<th>Q7</th>
<th>Q8</th>
<th>Q9</th>
<th>Q10</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>x</td>
<td>x</td>
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<td>x</td>
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<td>4</td>
<td>9</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td></td>
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</tbody>
</table>

A ten item online activity using Kahoot was used to evaluate the retention of the trainees. Out of the ten questions, one item (Q8) is significantly easy for all of them as everybody got it correctly.
The question was “if paper B analyzes paper A, and you used the analysis of paper B, which paper you cite?” In every question, you always have to choose the best answer. The options were: paper A, paper B, both, or none. The correct answer in this question is paper B. Questions 3, 5, 7 and 9 received nine correct answers each. Q3 is about paraphrasing properly, Q5 asks about the number of words needed to use block quotations in APA format, Q7 is about using proper images, and Q9 is on the consequences of plagiarism. Based on the table, Librarian 3 missed to provide the correct answer for Q3, Q5, and Q9. Going back to the table, it is noticeable that Q1 received the lowest number of participants who got it correctly. Or do they need more time to understand how Kahoot works? Q1 asks what constitutes an act of plagiarism. Kahoot uses shapes and colors and the participants may still be adjusting their eyes and trying to understand the question. Out of all the librarians, only one managed to receive a perfect score (Librarian 9). Librarians 2, 6, 8 all received nine points. One librarian failed this online quiz. Librarian 3 only managed to get three correct answers. The rest received more than 50% correct answers which mean they passed the quiz.

When it comes to the questions, everything was discussed during the lecture. There must be a state of confusion and it is normal. Are these librarians equipped with enough knowledge on plagiarism? Constant training and practice is needed for them to fully understand everything.

6. CONCLUSIONS AND RECOMMENDATIONS
If librarians train our academic community, then who else will train librarians? This study points out that we need professional help at all levels with the support of our colleagues at work. Librarians should take part in regular professional development activities to strengthen their skills and expertise. At some point, librarians were given tasks that are new to them. The only choice is to accept it since there is no one to do it. Lack of experience can be developed in time. In this case, librarians who were assessed with their knowledge of referencing needs to familiarize more with the APA citation format. In the case of the plagiarism exercise, 80% passed the activity with only one getting a perfect score. This only means that more time should be given in understanding what constitutes plagiarism and how to avoid it. The Nazarbayev University Library has developed its own LibGuides on referencing and plagiarism and librarians should understand them fully to practice what they preach. As a developing nation, the concept of plagiarism should be given more attention as it is the core value of an honest society and it promotes academic integrity. Further mentoring and a well-planned professional development program is needed so librarians will understand proper referencing, avoiding plagiarism, and realize its effect to building a university imbued with academic integrity. After all, we are all thinking about the image and reputation of our own organizations.

7. REFERENCES


APPENDIX

PLAGIARISM QUIZ

1. Which of the following is an act of plagiarism?
   A. Translates a foreign language work and submits as your own
   B. Changing a few words of a paragraph someone else wrote
   C. Submits an altered information or making-up a data
   D. All of the above

2. What sources should I cite?
   A. Common knowledge
   B. Lyrics of a song
   C. My own photograph
   D. Urban legend

3. Paraphrasing properly is to:
   A. Change a few words to make it your own and cite it
   B. Put quotation marks around the text and cite it
   C. Use only the idea without citing it
   D. Summarize the text in your own words and cite it

4. Can you reuse your own work and re-submit it into another class requirement without citing it?
   A. No, it is self-plagiarism.
   B. Yes, it isn’t plagiarism.
   C. Yes, because it is my own work.
   D. No, because it is against the law of god

5. APA style suggests using a block quotation for how many words?
   A. More than 10 words
   B. More than 20 words
   C. More than 30 words
   D. More than 40 words

6. Is it necessary to cite information that is a common knowledge or widely accessible?
   A. Yes, especially accepted facts
   B. No, unless they are historical documents

WBIMLC 2020
C. Yes, especially folklores
D. Depends on citation format

7. You see something on Twitter and Facebook that you really like to grab, so you:
A. Copy-and-paste the post just like your own work
B. Give credit to the person you took it from
C. I will not bother.
D. Post it in my VK

8. Paper B analyzes paper A. You used the analysis of paper B, which paper do you need to cite?
A. Paper A
B. Paper B
C. Both
D. None

9. What are some consequences of plagiarism?
A. Suspension or expulsion from school
B. Bad reputation
C. Loss of job
D. Loss of job

10. Which subscription database is recommended to become a responsible researcher?
A. Credo Reference
B. Citi Program
C. Endnote
D. Zotero
LIBRARIES AND CHALLENGES FOR THE FUTURE: DATA MINING AND ITS PURPOSE, BENEFITS AND MEANING

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ABSTRACT
Libraries are increasingly entering the digital age and demands on them to offer more digital services are widening, with user expectations of "remote or distant access", "distant learning" and use of other modern internet technologies. To this end, libraries must accelerate their use of technologies like AI, "data mining", "machine-readable data", "machine-generated classification", "semantic ontologies" and internet accessible catalogues and content – because their aim should always be user benefit, user convenience and user satisfaction. In this paper, I examine some ways and technologies with which libraries are trying to fulfill their modern role and expectations of modern user. Apart from offering online-accessible library catalogues, which many libraries have done already, the range of library services was further expanded by offering their metadata and library/textual content for text and data mining. This is an increasing trend in the field of Digital Humanities. The results of the clustering in "automated metadata generation" highly depend on the quality of the bibliographic metadata, which means that our challenges must be related to semantical differences in them. In the field of offering on-line collections of textual material: if we want to make the library's classical collections digitally available in structured and quantitative form, it is beneficial to use methods of "deep learning" and "artificial intelligence" (AI), to identify editorially meaningful content and to classify different sections of textual data. By using AI and other "language technologies", many libraries are also considering joining the library's metadata with the potential for "machine-generated classification" ("entity linking" and "object detection"). This way they can change, how the library and its users interact with metadata. Library data is often already described using "rich metadata formats" that would enhance current Semantic Web projects, used for data organization on the internet and developed by W3C. This is a critical and opportune time for libraries to assess and actively engage in formation of the "principles and practices of use of AI" institutionally and in their field of use. The ultimate aim here is the creation of specific tools in the future that will enable our users to see their relationship with metadata in a new light and to see, what this means for future library users. But this requires international cooperation and European libraries have no tradition of cooperation at such high levels so far. The international context of standardization enables their sharing of machine-readable data using metadata schemas and ontologies to assign meaning to this data. There are significant AI initiatives underway globally and nationally, in the field of libraries and in wider social and technological fields, but they are also faced with ethical issues. So here ways and balance should be found to address their operational needs, while also respecting the rights of users and their expectations of data privacy.

Key words: libraries, digital age, metadata, artificial intelligence, ethical approach

1. INTRODUCTION
Libraries, with their thousands of years long history, can be described as warehouses and providers of information and knowledge. For this information to be accessible, it should also be adequately organized – therefore “organization of knowledge” is also one of their principal tasks. For this reason, every technological advance and era puts new and additional demands on libraries, about how this “organization of knowledge” is systematized and achieved. Therefore today, digital technologies of various kinds are already an important part of functioning of modern libraries and their role is increasing with each year, since libraries are also dealing with large amounts of information. To organize all this information, Artificial Intelligence (AI) is becoming one of their tools of choice. However, as with any other field of application of digital
technologies and “artificial intelligence”, they must take into account ethical and social dimensions of use of these technologies, so that the results of their use of them should be beneficial for them, for their users and for societies as a whole, in which they function.

2. USER CONVENIENCE AND SATISFACTION, WHILE SAFEGUARDING HIS PRIVACY

There are many ways libraries collect data on its users: from list of books lended out to them, to their names and addresses for sending them notices. The same is true for online users of library’s online services. On the basis of this collected data, user can be presented with materials of interest to him, but from an ethical standpoint, library should also protect his right to privacy.

Libraries as “warehouses of knowledge” are non-commercial providers of large amounts of data, trusted guardians of knowledge, collectors and providers of informational data. Vision of library's role in the future depicts them as integral part of digital processes and informational data in the public domain. How can libraries be part of this development? Libraries are basically not a part of world of commercial transactions, they are free (or reasonably cheap) services and open and accessible for all users; they are financially dependent on government and are provided by the government as a public service to its citizens. The challenge for libraries today lies in their identity: how can they be part of the technological development (with providing reliable, enriched data, structured by categories and suitable for the online web environment) without giving up their basic functions?

Here we return to user’s right to privacy: privacy is the core ethical value libraries must respect, but libraries with the third partner as a provider of their online services (like Google, Facebook, Microsoft or some smaller local provider), can unfortunately misuse this user private data. Therefore libraries must ensure their independent funding, so that their collected user data will be safe from commercial interferences and not misused by private companies. Their personal user data must be collected safely, that is ethically, respecting user’s rights. Data, if not guarded properly, is constantly in danger of being compromised or abused. We can acknowledge how pervasive modern online technology has become, while still rejecting the trend of constant surveillance, commercial or by the state, that harms the communities we serve.

With more efficient personal data management skills, libraries can better understand the potential societal impacts of digital services and AI, especially in the area of human rights: so they can play an important role in making sure that AI literacy initiatives are fundamentally inclusive and available to all.

For that reason, many national and international organizations felt a need to formulate principles of beneficial and ethical use of digital technologies and “artificial intelligence” in modern society, in various fields of their application and even in libraries in particular.

One of them was UNESCO and its sub-section COMEST, which endeavors to establish a global dialogue on the ethics of artificial intelligence and its applications. It maintains that talking about ‘theoretical’ or ‘scientific’ AI is not enough. Although “using AI concepts and models to help answer questions about human beings and other living things” can be helpful, such theoretical questions involve a number of ethical and societal concerns and implications. It also raises questions of uniformity of AI solutions in relation to a need for maintaining and respecting cultural diversity. Therefore, although artificial intelligence can play an increasingly important role in processing, structuring and providing of information, its use should be subjected to higher ethical, cultural and societal principles, needs and demands.

In cultural field, AI should be used in such a way that it fosters cultural diversity, and a multilingual approach should also be promoted. AI should therefore strengthen freedom of expression and foster universal access to information.

In a similar way, “EU Report on Intellectual Property Rights for Development of AI” formulates “Opinion of the Committe on Culture and Education”, in which it stresses the need for an ethical
framework and strategy for digital data, accompanied, if necessary, by legislation in which fundamental rights and Union values are enshrined as ethical duty. By recalling that “data” is the central element of the development and training of any AI system, Committee stresses: “that this includes structured data, such as databases, copyright-protected works and other creations enjoying IP protection which may not usually be considered to be data; therefore that it is also important to address the notion of IP-relevant uses relating to the functioning of AI technologies.”

If we now return to the question of our vision of library's role in the future, posed at the beginning of our paper: we already described libraries as integral part of digital processes and informational data in the public domain, as well as non-commercial public service and information providers for their users, open and accessible for all of them; we can now add another important and indispensable feature of identity of present and future libraries: they should also serve as “guardians of data ethics”. One of the world-renowned authors that put an emphasis on exactly this point, was Y. N. Harari. At his speech at “World Economic Forum” in Davos this year, he contemplated that mankind in 21st century is faced with many existential challenges and he particularly warned about the ethical problems of our use of artificial intelligence. He claimed that we should maintain and safeguard the ethical concept of “intellectual freedom”, as one of the most important concepts of social and human development.

Shaping the future of our societies in an ethical and sustainable way, with the use of AI and otherwise, is also a main goal for Sustainable Development Solutions Network (SDSN). Its director Jeffrey Sachs intends to develop and provide an interdisciplinary framework, based on Aristotelian ethics, within which the implementation of UN “Agenda 2030” for Sustainable Development will be facilitated.

International library and standard organizations are also encouraging the use of AI. In a way, an increasing amount of data modern libraries store and preserve, demands an increasing use of digital technologies and AI, but as we said, we should take care and precautions that we use “ethical and social AI”. The use of AI should always be considered in view of benefits it can bring, but we must also pay attention to its disadvantages, shortages and dangers it brings with it.

The growing importance and relevance of artificial intelligence (AI) to humanity in various fields is today undisputed. But there is, to date, surprisingly little formal research published on AI ethics, or ethical dimension of AI use; which is surprising, since as we know, AI should serve its human users and not the other way around.

On the other hand, libraries as “warehouses of information” can also be regarded as “data stores” that can provide material for training, forming and teaching AI models, algorithms, tools and concepts. So one of essential roles of modern libraries and their new “informational” identity should be in providing curated data to improve AI and form new AI models, but also in preserving those data, models and records for oversight of how this new AI technology is implemented. For example, there are various degrees of similarity in lexical and syntactic grammar that can help us understand, if similar words and phrases are being used in a lexical corpus. But the question is: who decides, which features are important to determine the semantics of an object (textual or otherwise)? What is the contextual relationship of this object to a collection or to a domain? What constitutes such a collection? Those decisions are finally not automated nor can they be; they require human expertise and, importantly, they are matters of choice – of a librarian, a linguist or a reader, who decides.

The “IFLA Statement on Libraries and Artificial Intelligence” has outlined the key roles libraries can take on in a society that employs AI, regarding ethical concerns and especially with attempting and searching for new uses of their machine-readable library collections: “The use of AI technologies in libraries should be subject to clear ethical standards, such as those spelled out in the ‘IFLA Code of Ethics for Librarians and other Information Workers’.”
IFLA suggests that for such collections, libraries can interact with AI researchers and developers to create applications specifically for library use and/or in response to user needs, including by creating accessible services which have not been possible before. The overall objective of IFLA/FAIFE is to raise awareness of the essential correlation between the library concept and the values of intellectual freedom. To reach this goal, IFLA/FAIFE collects and disseminates documentation and aims to stimulate a dialog both within and outside the library world. Their committee’s position puts an emphasis on freedom of expression, freedom of opinion and how privacy rights are very much connected to that. As the regulation of AI in libraries is still in its infancy, guidelines, ethics codes, and actions by and statements from governments and their agencies on AI, are also addressed. Their country surveys look at various legal issues, including data protection and privacy, transparency, human oversight, surveillance, public administration and services. One example is Library of Congress that explores how technology can help libraries to put them into a position, to lead broader conversations about responsible use of these technologies in a society at large. Their website is also compliant with W3C accessibility design guidelines and American accessibility Workplace legislation (Section 508). Older, legacy pages are in the process of being upgraded for compliance, and the Library of Congress is making every effort to make its online collections and information available to all members of the public. The objective of their community group (Bibframe2Schema.org) is to facilitate a consensually agreed route for the conversion of bibliographic data into linked data.

AI has received most attention in the field of applied ontology in subfields like natural language processing, within machine translation and knowledge representation, but “ontology editors” are being often used in a range of fields like education, without the intent to contribute to AI. In any field of knowledge, different points of view and approaches are always at play. It can be stated that different positions on any issue have implications for relevance criteria, information needs and for criteria of organizing knowledge. For example, in multilingual thesauri, equivalence is also applied between corresponding terms in different natural languages. Establishing correspondence is not always easy, and the standard provides recommendations for handling the difficulties that commonly arise. Requirements for software (or AI) to manage thesauri are given, but not for the databases or software, used directly in search or indexing applications. Libraries can help to unify different standards and qualities for “ontology mining” between different ontologies, which represent entities, with all their interdependent properties and relations, according to a system of categories. There is considerable library work already done on problems of “ontology engineering”, and lively debates concerning a question, to what extent “normative ontology” is possible, or not. Libraries developed information retrieval thesauruses with the principles and practical guidance for constructing thesauri, that were enshrined in the international standard ISO 25964. Thesaurus standard differentiates between concepts and terms and takes into account the pressure for clarification through data models. In search for foundational requirement for knowledge, which is represented in symbolic models of words or in “neural nets”, we encounter some problems with AI: the biggest part of the knowledge representation is not well-specified, especially not with the respect to their semantics, as often there is no clear syntax in the presented data. Therefore, we need an intense focus on taxonomies and taxonomic reasoning and with that we can make transformation of the human-readable WWW into machine-readable semantic-web (RDF). Only after the data is organized enough, it can be presented to the reader/user in a meaningful way. By using AI and other “language technologies”, many libraries are also considering joining the library’s metadata with the potential for “machine-generated classification” (“entity linking” and “object detection”). Library data is often already described using “rich metadata formats” that
would enhance current Semantic Web projects, used for data organization on the internet and developed by W3C.
The results of the clustering in “automated metadata generation” highly depend on the quality of the bibliographic metadata, which means that our efforts should be directed towards clarifying, explaining and classifying semantic differences in them.

3. CONCLUSION
Web ontology language is important as a “standard ontology” representation language and there is a large need for “controlled vocabulary”, and libraries can help here with their own vocabularies. Librarians can therefore actively participate in use of “data mining” tools, which is especially helpful to find new relations between data, therefore new meanings in those data. Also, librarians can help in development of technologies to enhance categorization schemes and to improve search results and make them more precise.
Therefore, a basic understanding of how AI and ML (machine learning) work, their underlying logic and their limitations, can be very useful in everyday library working process, but special concern must be put to remove underlying biases in such use.
These safety and ethical concerns are very real and serious. AI software and hardware are vulnerable to the usual security breaches in cyberspace. In principle, “open-source code” is the best approach for the use of AI in libraries as public institutions, since every librarian or technician can modify a program according to his/library’s needs.

4. LITERATURE


INFORMATION LITERACY AND ACADEMIC WRITING COURSE: UNIVERSITY OF ZADAR CASE

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ABSTRACT
This paper presents the results of information literacy (IL) research among students of the University of Zadar.
IL was examined among students who attended Academic Writing (AW) course and compared with the level of IL among students who did not attend the course. Main instrument used for measuring IL among students was survey administered to 83 students. Analysis of survey answers showed that students who attended AW course have more developed IL skills that their peers who did not attend the course. Also, vast majority of students who did not attend AW course considers that AW course would improve their IL skills. Findings of this research could be used as pointers in creating new curriculum for AW course as well as other IL related courses taught partly by librarians.

Keywords: information literacy, course curriculum, Academic Writing course, University of Zadar

INTRODUCTION
The term “information literacy” was coined by Paul Zurkowski in 1974 and since then it has been established as one of the main research topics in library and information science. CILIP (2018) defines information literacy (IL) as a set of skills and abilities which everyone needs to undertake information-related tasks. Over the years IL has become one of the fundamental skills for university students in order to achieve and maintain required academic success.
ACRL defined IL on two occasions. First definition (ACRL, 2000) claims that IL forms the basis for lifelong learning and that is common to all disciplines, all learning environments and all levels of education. According to ACRL, an information literate individual is able to:
- Determine the extent of information needed
- Access the needed information effectively and efficiently
- Evaluate information and its sources critically
- Incorporate selected information into one’s knowledge base
- Use information effectively to accomplish a specific purpose
- Understand the economic, legal and social issues surrounding the use of information, and access and use information ethically and legally

In 2015, ACRL published Framework for Information Literacy for Higher Education and defined IL as a “set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning”.
From both of the above mentioned definitions, it is evident that information technology has a significant impact on IL concept.
Nowadays, when the vast amount of irrelevant information can be found on the Internet, the ability to find, critically evaluate and effectively use the relevant information is paramount in order to function as an information literate individual. As Saracevic (2007) points out “information has changed all information activities dramatically”. According to Lau (2006), IL, combined with lifelong learning, improves the set of personal choices and options opened up for and offered to an individual in the context of personal, family and societal matters.
Therefore, it is obvious that IL, as a skill, goes beyond academic environment and has a crucial impact on everyday life and decision making.

IL competencies among students in higher education are paramount in order to achieve and maintain adequate academic success and therefore, an emergent body of literature has been published on teaching (Torras & Pemmer Saetre, 2009; Secker & Coonan, 2013; Allan, 2016) and measuring information literacy (Project SAILS, 2001; Leichtner et al. 2013; Jokić et al., 2014; Chan, 2016).

Many academic libraries partake in developing IL skills among students. In most cases, university libraries offer individual instructional work, group workshops and one-shot ad hoc instructions that take place at the reference desk.

Although for-credit information courses can be traced long into the past (Jardine, Shropshire & Koury, 2018), IL teaching has become one of the central concerns among librarians in the past three decades (Bruce, 1997) and therefore many universities offer information literacy courses to their students.

IL teaching in higher education can be done in several ways of which we emphasize standalone information literacy courses and courses in academic writing, methodology etc. which curriculum can contain lessons on IL.

At the University of Zadar, information literacy has been offered as a standalone elective course since academic year 2011/2012. The course is held jointly by the professors from the Department of Information Sciences and librarians from the University library (Rubinić, Stričević & Juric, 2013).

At the Department of Croatian Studies of the University of Zadar, academic writing course is a mandatory course for the first-year students of Croatian studies and as an elective course for all other undergraduate and graduate students at the University of Zadar.

Bearing in mind that information literacy curriculum should be interprofessional and therefore taught collaboratively by a range of staff members within an institution (Secker & Coonan, 2013), part of the course, since academic year 2018/2019, has been taught by a librarian employed at the University library.

Since academic year 2018/2019, two generations of students have attended Academic Writing course with IL integrated in its curriculum and there is a need to determine IL level among those students and compare it with the IL level among students who did not attend the course.

Main hypothesis of this research is following: Students who attended Academic Writing course have better IL skills than those who did not attend the course.

Secondary hypothesis is following: Integrating IL into curriculum has positive effects on the level of IL among students.

METHODOLOGY

This research had two basic objectives. The first objective was to determine level of IL among students through questions and the second objective was to let students self-evaluate their IL level.

The main instrument used to achieve stated objectives was survey consisting out of 18 items. Survey was created using Google docs Event Feedback Form and it was available to students from 5th to 23rd of October.

Students were invited to take the survey via email and through their social networks groups.

RESULTS AND DISCUSSION

A total number of 83 students completed the survey out of which 95% were female students and 5% male students.
Out of 83 students, there were 33 first-year undergraduate students (39.8%), 17 second-year undergraduate students (20.5%), 13 third-year undergraduate students (15.7%), 8 first-year graduate students (9.6%) and 12 second-year graduate students (14.5%).

Chart 1: Number of students who completed the survey

47 (56.6%) out of 83 students who completed the survey attended the Academic Writing course and 36 (43.4%) did not attend the course.

When asked: Are you familiar with the term IL and do you know what it stands for? 63% respondents answered that they were familiar and that they knew what it stood for, 27% answered that they were familiar but didn’t know what it stood for, while 10% answered that they were not familiar with this term and thus didn’t know what it stood for.

Among the 63% or 52 students who answered that they were familiar with the term IL and that they knew what it stood for, there were 37 students who attended the course and 15 who did not. 6 students who attended the course answered that they were familiar with the term IL but didn’t know what it stood for whereas 17 students who gave this answer and did not attend the course.

Only one student who attended the course responded that they were not familiar with the term IL and didn’t know what it stood for whereas 7 students who gave the same answer and did not attend the course.

From this data we can conclude that Academic Writing course has significant impact on introducing information literacy concept and meaning to students.

32 out of 47 students who attended AW course stated that this course has improved their IL skills and 34 out of 36 students who did not attend course stated that, in their opinion, attending such course would improve their IL skills.

Chart 2: Did AW course improve your IL skills?
Participants were also asked to self-evaluate their level of information literacy using five point Likert scale. Average result gained from students who attended the course is 3.6 and average result gained from those who did not attend is 3.2. From the data above, we can conclude that students who attended the course consider themselves more information literate than their peers who did not attend the course. Nevertheless, taking into consideration that vast majority of respondents have chosen answer 3 on five point Likert scale, (neither agree nor disagree), we can conclude that one part of the students have only vague idea on IL concept and therefore this should be taken into consideration in creating future AW curriculum.

The purpose of eight questions regarding IL skills was to determine how well students were acquainted with types of printed publications (monographs, scientific journals, manuals, encyclopaedias etc.), on-line information sources (electronic library catalogues and databases) and finally search techniques (Boolean operators) and information sources evaluation criteria.

When asked to odd out type of publication that is not reference publication offered answers were:

- Encyclopaedia
- Scientific journal
- Manual

19.4% of students who did not attend AW course gave the correct answer while only 4.3% of those who attended answered correctly. This answer shows that more time during AW classes should be dedicated to explaining types of publications to students.

When asked to determine publication type from the citation:


38.3% of students who attended the AW course answered that publication type of this citation is article in edited book which is correct answer, while 41.7% of those who did not attend AW course gave the correct answer, as well.

Questions on usage and possibilities of the online library catalogue and databases were answered correctly by 45.5% of students who attended AW course (\textit{I can use the catalogue to find out what books and journals are offered by the library and I can check whether particular book is available or borrowed}) and 42.6% (\textit{In most full text databases I can usually find scientific journals and monographs}), respectively.

Students who did not attend AW course gave 19.4% and 22.2% correct answers, respectively.
When asked about using Boolean operators while performing information search, almost 93% of all respondents answered that they didn’t know what Boolean operators were and how to use them.

Taking into consideration that vast majority of all respondents are not acquainted with Boolean operators and their use, we can conclude that usage of Boolean operators should be firmly addressed during future AW course lectures regarding IL and online library catalogues and databases usage.

Furthermore, students should be introduced to the scientific journal hijacking issue because when asked about journal hijacking, 65% of all students responded that they were not familiar with this problem.

Chart 5: Can a scientific journal be hijacked?

When calculating the ratio of correct and incorrect answers by groups (group that attended the AW course and group that did not attend the course) we come to the conclusion that there is a difference in the percentage of correct answers in favour of a group that attended AW course. Therefore, primary hypothesis of this research, in which we stated that students who attended AW course have better information literacy skills than those who did not attend the course, has been confirmed.

Considering that 68% of students who attended AW course claim that the course has improved their information literacy skills (see Chart 2), we can say that secondary hypothesis of this research in which we stated that integrating information literacy into curriculum has positive effects on the level of information literacy among students, has been confirmed as well.

CONCLUSION

Considering that IL skills are paramount in achieving and maintaining academic success among university students, there is a need to assess the impact of IL teaching courses on students’ IL skills.

At the Department of Croatian Studies of the University of Zadar, IL has been included into AW course curriculum since academic year 2018/2019.

In this paper we have tried to examine the level of IL among students who attended AW course and compare it with level of IL among students who did not attend AW course.

We can report two main conclusions from the survey results.

Firstly, there is a difference in the level of IL in favour of a group that attended AW course. Although our primary hypothesis is confirmed, difference is not as pronounced as we expected and therefore further improvements in AW course curriculum are needed.

Secondly, vast majority of students who did not attend the course are of the opinion that AW course would improve their IL skills.

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The benefits of this research are twofold. Firstly, it shows that level of IL among students who did not attend AW course is higher than expected although students tend to overestimate their IL skills (Maughan, 2001). Secondly, it shows that there is a need for continuous improvement of the information literacy curriculum considering that some questions from the survey were answered incorrectly by more than 90% of students. Therefore, constant evaluation of the course curriculum and learning outcomes is the only way to further improve the course and hence the students’ IL skills.

REFERENCES
DEVELOPMENT OF A NEEDS HIERARCHY FOR ORGANIZATIONS TO COMPLEMENT NEEDS HIERARCHY FOR INDIVIDUALS IN TODAY’S DIGITAL AGE

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ABSTRACT
In this work, selected interpretations and adaptations of Maslow’s Needs Hierarchy framework is introduced to address digital needs, suggesting to incorporate also an organizational needs perspective to complement the individual needs perspective originally introduced by Maslow. In regard to this, the paper first presents adaptations and interpretations of Maslow’s Needs Hierarchy for individuals with respect to digital life, then suggests to incorporate an organizational needs modeling to be used together with individual needs framework with possible implications for the digital era.

Key Words: Needs Hierarchy; Digital Needs; Maslow.

1. INTRODUCTION
This paper aims to reinterpret and adapt Maslow’s Needs Hierarchy model to address today’s digital needs. To do so, it also suggests to incorporate organizational needs hierarchy to complement individual needs hierarchy, with possible implications in theory and practice. Accordingly, the paper initially discusses Maslow’s Needs Hierarchy for individuals and its relevant adaptations and interpretations with respect to today’s digital age. Then it incorporates an organizational needs hierarchy as another relevant interpretation of Maslow’s original model, and concludes with possible implication of using individuals and organizations needs modeling together for the digital era of today and future.

2. MASLOW’S NEEDS HIERARCHY AND ITS ADAPTATIONS AND INTERPRETATIONS IN DIGITAL AGE
Maslow’s needs hierarchy is a well-known model for explaining and addressing human needs. Accordingly, different human needs are addressed with respect to specific categories such as basic, physiological and self-fulfilment needs in general terms and interlinked with each other in a pyramid hierarchy. Originally introduced in 1943, the model was updated in 1970s. For more than half a century, the model is being applied in different academic and practical areas, receiving various suggestions and critiques that eventually contribute to its improvement and continuous use.
In today’s world, new, innovative adaptations have been made on the model to address digital needs. Even underneath these needs, it is also suggested to exist the basic need of electricity/battery.

One of the distinguishable issues among these new generation adaptations and interpretations is the inversion of the original pyramid. An example of which can be seen in the below figure, where AI stands for Artificial Intelligence, DL for deep learning, and KI for Knowledge Integration.
In Maslow’s hierarchy, in accordance with the structure of the pyramid, the lower level, more material needs are given more space and emphasis, whereas higher level, more moral needs take up less space. Inversion of the pyramid enables the interpretation in order to give more space to higher level needs and less space to lower level needs. This interpretation is thought to be more in line with socio-economic needs of human nature and provides a more coherent view with respect to the interrelations among different human needs. It can also be useful to make new interpretations and adaptations of Maslow’s modeling.

One of these new, note-worthy interpretations is part of Digital Society Index (DSI) studies. Accordingly, the hierarchy structure is left to provide a more cohesive approach for addressing digital needs and related social challenges. (DSI 2019)
A significant support to these studies in recent times comes from Razi’s works on addressing human needs in 12. Century, which are reinterpreted and underlined in recent times (Choudhury, 2011, Noor, 1998). Leaving aside the related philosophical and mathematical underpinnings that are not as part of the scope of this work, accordingly, this work basically suggests that addressing moral needs of human are more significant than addressing material needs, which provides a good balance with Maslow’s perspective that signifies material needs over moral ones.

When all these different adaptations and interpretations with respect to human needs are considered together, it can be seen that the among 4 different needs illustrated in Figure 4, Basic, Psychological and Self-fulfilment needs are adapted from Maslow’s hierarchy in Figure 1 (DSI 2019). The remaining Societal needs is then considered to be matching well with Razi’s (Figure 5) comprehensive approach that proceeds over the unity of individual and social awareness. How the technology could be utilized to support addressing digital needs and how high level moral needs should take more place than lower level material needs in the respective illustrations of Figure 2 and 3 are also useful. Additional interpretations can also be made with respect to the quantity and quality of these needs, including and ranging from a simple two-layer categorization between moral and material needs as in common sense, to a more elaborated 10-layer classification as in Figure 5.

In addition these interpretations and adaptations on human needs, incorporation of organizational needs could also provide new perspectives, as discussed in the next part.
Incorporating Organizational Needs towards a New Model of Needs Hierarchy

There also numerous studies that adapts Maslow’s needs hierarchy into organizational entities. Among those, studies such as how to motivate employees in an organization that explicitly interlink individuals and organizations are the first to notice. In addition to these, adaptations into various business areas and applications are noteworthy. Even there are studies that suggest addressing needs of nations. (Jurist 2019; Study, 2020; Smith, 2010). There are also studies that aim to develop a more tailored and specified needs modelling for organizations. For instance, the below aspects, suggested as part of such organizational needs, seen as a a good adaptation of the human needs hierarchy modeling (Kayode, 2018).

- Perpetuation: The need to exist forever.
- Dominance: The need for increase market share and monopoly
- Growth: The need for expansion in other to satisfy significant business mission
- Stability: The need for structural stability
- Survival: The need to stay afloat. The need for consistent cash flow.

What is interesting to take note in all these studies is their common point that addressing the material needs takes initial or more space than addressing non-material needs of organizational entities (for instance cash flow or net profit is crucial for an organization to survive in the short or long run.) Considering the original nature and establishment of organizations, this is understandable, and in fact in accordance with the original Maslow’s approach to human needs. However, it could also be suggested that in today’s world, it could be also time to make revisions on these organizational needs hierarchy to address the digital needs (or pandemic and post-
pandemic necessities). In fact, in today’s strategic management approaches, the importance of organizations’ reason for existence and their respective moral and ethic values and social responsibilities is increasing. (Muslu, 2014; Vural and Coşkun, 2011).

In any case, incorporation of organizational and individual needs hierarchies together into one unifying perspective could have significant implications, some of which will be introduced in the final part of this paper.

CONCLUSION

The possible implications of understanding and using the needs structures and relations of individual and organizational entities together could prove to be very useful for more-effectively addressing all of these needs, as the socioeconomic interlinks between individuals and organizations is inseparable. For instance, individuals work for organizations as staff, and organizations offer services or products to individuals as customers, an example of which can be seen in this final figure.

Figure 7. Hierarchy of Startups to Address Human Needs, based on Maslow’s Original Model (CB INSIGHT, 2015).

There are also implications at more philosophical and theoretical levels. For instance, according to some scientific (and non-scientific) perspectives, living and non-living entities that construct individual and organizational systems could be based upon certain same, all-unifying rules and principles. For example, accordingly quantum mechanics could be used to develop conscious, artificially intelligent entities.

In Turkey, some of the coauthors also work on development of a national digital index, from which this work has been inspired, benefiting from the same idea of utilizing an integrated framework of individual and organizational needs and their relations to address socio-economic needs in the digital age. The coauthors also hope that this conceptual paper contributes to the progress of other academic and practical works in the world.

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ABSTRACT:
Augmented and Virtual Reality have dramatically changed almost every aspect of our lives over the past several years. This rapid development has been attracting the library's attention. This article introduces Augmented and Virtual Reality and related applications, explores Augmented Libraries which includes possibility of display and creation of contents of books in the immersive virtual environment, integrate immersive technologies into classroom, examines the implications of tools and software applied in library services, and the challenge in copyright and preservation of Augmented and Virtual Reality.

Key words: Augmented Reality, Virtual Reality, Book, Device, Application, Copyright and Preservation

1. INTRODUCTION
The technology has greatly changed the landscape of libraries. Majority of library resources have been switched to electronic or digital resources. Three-dimensional Virtual Reality (VR) provides potential ability to offer library services via implying a complete immersion experience. It is a challenge and also an opportunity for libraries and engages librarians to rethink their roles, services and embrace new technology.

Augmented Reality (AR), Virtual Reality (VR) and Mixed Reality (MR) have existed for years. Recently it has become more widely used in variety fields. AR/VR offers us new ways to see the world around us.

2. AR, VR and MR
There are different explanations about the Argument Reality, Virtual Reality and Mixed Reality.

2.1 AR and Application
AR is “an enhanced version of reality created by the use of technology to overlay digital information on an image of something being viewed”. AR tricks one’s brain into perceiving elements that are not physically there. AR adds digital elements to a live view often via smartphones, tablets, heads-up displays, or AR glasses. It will most likely have an impact on our lives at some point in the near future (Varnum, K. J. 2019).

AR is used in game, business, medicine, military, construction and maintenance. The first commercially successful AR application was Pokémon Go. “Pokémon Go” got entire generations of players moving. The game players can experiment with location tracking and virtual game play with familiar characters that have entered the collective consciousness. In the business field, Swedish furniture giant IKEA uses AR in a real-time view of your own living room that you can virtually enhance with different paint or carpet colors. In medicine, AR applications help students to visualize the medical conditions and treatment methods. It can benefit surgeons. In the military field, AR applications can display the vision via data glasses or a so-called head-up display, this data could contain important and life-saving information that could determine the success of a mission. AR technology is also being used for complex repairs, such as those carried out on machines. Specialists can benefit from AR, if, for example, repair descriptions or components can be precisely assigned using AR labels. AR devices include Aryzon 3D AR Headset Epson Moverio BT-35E Vuzix M100

2.2 VR and Application
VR implies a complete immersion experience where a user leaves the real-world environment behind to enter a fully digital environment. Current VR devices are HTC Vive, Oculus Rift or
Google Cardboard. VR applications are used in VR games, 360-degree movies and education fields. There are many discussions about how VR can support education. VR can help educators engage students in the classroom with 3D models and students can assess information anywhere and anytime without any special equipment.

2.3 MR and Application
MR experience, which combines elements of both AR and VR, real-world and digital objects interact. This interaction ability gives mixed reality technologies a huge number of potential applications. MR is still in the development stage and has not been widely adopted yet. MR has been explored in education, engineering, and entertainment.
MR can engage students to interact with the environment in an immersive experience and make the learning in a fun way. There is the potential ability that MR can provide real-time simulation of engineering processes. Magic Leap uses a MR in cinema by using a Dynamic Digitised Lightfield Signal. MR applications are now slowly emerging into different fields.

2.4 Difference among AR, VR and MR
AR adds to reality, projecting information on top of what you're already seeing. VR headsets fully immerse users into a digital environment, shutting out the real world altogether. You could say AR is VR embedded in the real world. With mixed reality, virtual objects become part of the real world. MR is far more ambitious than AR.

3. Augmented Libraries
Libraries started exploring Immersive technologies a few decades ago, it has developed in recent years, there are different applications that potentially or practically are used in the library world.

3.1 AR/VR/MR Workshop and Tour of Library
Libraries offer space and provide consultation services via workshops and activities; patrons can use libraries' collection of VR devices to create VR contents for their learning and research. For example, Western Michigan University Libraries, students can use AR Lab to experience both the entertainment and educational side of VR content, the training and online tutorials help students to discover and make their own VR contents. Libraries also use VR to create virtual tour and photography for library services. You can use tools to create VR maps for events. For example, the North Carolina State University Libraries use Virtual Reality & Augmented Reality to create VR tours.

3.2 Display and Creation of Contents of Book
We used to have books with printed text-only, then many scholarly resources have switched to e-resources, the AR will be the big movement in books. AR makes the readers become participants. For example, with the AR book - iStorm: Wild Weather and Other Forces of Nature, you can experience the wildest weather at home. With coloring books, children can color a character and interact with it on a device screen.
Library has made some progress in using VR to display and create the contents of Medieval manuscripts, rare books, and artists books. VR could look at a shelf of books and see reviews, segments, author biographies, and so on without typing a word. University of South Carolina uses digital photography and 3D modeling to explore 15th Century Illuminated Manuscripts. Users engage with the contents of this manuscript and gain appreciation for rare materials. There are some recommendations that VR could be used to compare and recontextualize library collections across geographies and share VR contents by 3D-scanning partners around the world.
3.3 AR/VR/MR Content in Classroom

AR/VR/MR provides body-centered interactions, in recent years, the costs of equipment associated with 3D data creation techniques are decreasing, these benefits are applied across academic disciplines and institutions. VR experiences argue to engage students learning via design work in architecture classes, anatomical instruction in medical schools, virtual trips in history sessions. For example, University of Stanford medicine educators use VR to teach anatomy. This is a huge advancement for many medical schools. These practices also attract more attention from libraries adopting AR/VR/MR technology. There are more and more discussions about creating content and using immersive learning environments in library information literature courses.

3.4 Tools and Apps Used in Library Services

Libraries use different tools and software to develop Augmented Libraries, they mainly focus on patron virtual reality experience, course contents design, library services and research help. The Microsoft HoloLens is an excellent way to demonstrate students the potential of augmented reality and it is suited to patrons with a different level of technology background. Reality Capture and 3DsMax are two software which creates 3D models and creates VR experience. Tour Creator - Google VR, Google Earth app and Aurasma are nice tools for archaeology lab and academic courses. VR can be used in medical research and education. Stanford Neurosurgical Simulation and Virtual Reality Center used VR as a tool for patient training and surgical tools. Edmersiv is an educational app that brings different objects, experiments and games. Matterport can be used to create maps or tours for library orientation. There are some great applications that help you to have amazing virtual field trips such as: VR Museum of Fine Arts can give you a great VR experience, with the developer behind, it shows you an immersive environment and it looks real. Pluto The VR Experience can provide 3D virtual reality excursions to the surface of Planet X. VR extends the capabilities of providing digital research data and sharing remotely, this opens a new window for discovery and analysis in higher education.

4. Copyright and Preservation of AR and VR

Libraries embrace the AR/VR/MR, on the other hand, there are considerations and challenges that the library is facing in copyright and preservation of AR and VR. More and more libraries start reproduction of physical items for books and art works, readers can browse those resources, it has increased the questions about copyright. VR technologies actually collect user data such as individual body language, eye movement and heart rate and records user personal information such as bank account and location via interaction, this causes privacy and security issues. Currently in general, libraries do hold the digital collection, it is often hosted by vendor or campus IT, there are some discussions about preservation of VR.

5. CONCLUSION

We have seen more and more development and applications emerge; however, this is just the beginning, as we enter the AR/VR-based society, initiating VR program in libraries and schools, collaborating with vendors and campus IT to integrate VR into curriculum and research, launching shared digital repository of VR are all in the development stage. VR will impact and improve library services in the future.
6. LITERATURE


ABSTRACT
Using the Dungeons and Dragons actual play podcast The Adventure Zone: Balance as a foundation, this paper investigates the information behaviour of Dungeons and Dragons players as a surrogate for the research behaviour of students. Drawing on existing information behaviour frameworks, most notably Everyday Life Information Seeking and Small Worlds theories, this paper describes the world of the game table and the actions of players in terms of research and information seeking. By then examining the behaviour of the McElroy family and their characters through the audio recordings of The Adventure Zone, this paper proposes a more nuanced understanding of information seeking and consumption behaviours. This analysis informs proposals both for examining one’s own information alignment and for undergirding library services aimed at students of differing alignments. By using the source material of The Adventure Zone, this paper argues for a practical, nuanced understanding of information literacy and information behaviour that more fully contextualises research and information seeking in social influences.

Key Words: information behaviour, research methods, information literacy, dungeons and dragons, storytelling, identity formation

1. ROLL FOR INITIATIVE: THE WORLD OF THE ADVENTURE ZONE
The Adventure Zone (TAZ) is a Dungeons & Dragons (D&D) podcast that debuted in December of 2014. The world of the first season (entitled the “Balance Arc” after the fact) began with the adventure The Lost Mine of Phandelver but quickly grew beyond the bounds of the prewritten kit. Throughout TAZ: Balance, Dungeon Master (DM) Griffin McElroy leads his two brothers (Justin and Travis McElroy who play Taako Taaco, a wizard, and Magnus Burnsides, a fighter who later takes levels in rogue) and his father (Clint McElroy who plays Merle Highchurch, a cleric) through a series of adventures to find a series of powerful magical items known as the Grand Relics and, ultimately, save the universe. The stakes for seeking and sharing information for the characters in this campaign are, consequently, very high indeed.

Of course for the McElroys themselves, the stakes are quite low. They are podcasters by profession, so they are invested in producing a good product for their listeners. The importance of the events of the game could not be more different for the players and their characters. It is for this reason that D&D is worth examining in our own quest for a better understanding of how people seek information. A good player separates what they know from what their character knows, lest they be accused of metagaming, but part of what makes tabletop roleplaying enjoyable and engaging is the phenomenon of cross-talk, the out of character discussion that takes place over the physical table and outside the world of the game. With the players operating on these multiple cognitive levels, the tabletop becomes a microcosm in which to examine the interplay of social and personal factors in information behaviour.

By studying the case of TAZ: Balance, I hope to add nuance to existing frameworks for understanding information behaviour that will, in turn, open up our understanding of how to provide library services to students whose approaches to research, despite apparent similarities, are very different. Dungeons & Dragons is an ideal model for this kind of investigation because the stakes within the world of the game are high but in the real world are low. As such, it captures the impactful but ultimately manufactured ways library users’ information worlds are limited. In particular, by engaging with the Small Worlds and Everyday Life Information Seeking frameworks I will construct the beginnings of a framework that captures the nuances of the ways students and library users limit their information worlds even within an open system.
2. INVESTIGATION CHECK: WHY THE ADVENTURE ZONE?

2.1 Why Dungeons & Dragons?

Dungeons and Dragons (D&D) was selected as the lens through which to examine information behaviour because of the structure of the game and because, for those involved in the gameplay at least, it’s fun. D&D is at its core about collaborative storytelling. Players make characters (or adventurers), team up with a small group of other player characters, and navigate the DM’s adventure to create a story together. Unlike other forms of make-believe, D&D has a structured way of determining the consequences of players’ and non-player characters’ actions: dice rolling. The DM plays the role of referee by setting the difficulty of specific actions, interpreting those dice rolls, and making calls when rules are ambiguous. And yet the dice rolls are still random. There are external forces that constrain the story. To quote the Player’s Handbook: “Anything is possible, but the dice make some outcomes more probable than others” (Mearls et al., 2014).

In the context of information behaviour, surprising though it may be, D&D is not significantly different from the research process. Though fantastical, D&D is about asking questions, using available resources to find answers, and building on those answers to ask better questions so that the characters can grow. While the average first-year student doesn’t have access to bardic inspiration nor the senior thesis writer access to a cleric’s spell list, they do grow, earn new skills and abilities, and level up (if we are to take the progression from first year to senior both more literally and more figuratively). D&D gameplay is built on the same foundation as research even if research has fewer swords and less sorcery.

Furthermore, D&D is fun. In some cases, this may be the marked difference between tabletop roleplaying and research, and it is this element that I argue makes D&D an optimal surrogate to study. The game has established information needs, avenues for addressing those needs, and external systems acting on its mechanics to influence the outcome in ways that the player/researcher cannot control, which all reflect the conditions of research. Moreover, as a game, D&D provokes interest through enjoyment. Interest is a powerful motivational force. Interest empowers the player to seek new information voluntarily, engage in problems that arise from the source of interest, and persist in the face of challenges to those activities (Renninger & Hidi, 2015). Triggering student interest is not within the scope of this paper, but it is relevant here because the presence of interest takes the pressure off the players to accomplish a goal for the satisfaction of some external party. Looking at D&D allows us to look at an idealized version of research and, in doing so, examine more closely the external factors that are most significant to a student’s personal relationship to research.

2.2 Why the Adventure Zone?

The Adventure Zone was chosen for this investigation for two reasons: its accessibility and the relative newness of the players. TAZ is lightly edited to remove some of the dead air while players roll and clarify basic rules, but I would argue that the concept of a podcast still captures the essence of information seeking in D&D because the information seeking is the source of the story. Though a podcast is edited and therefore suffers from changes made due to observation, so too would observing a real-time game. I would argue that while podcasters definitionally know they are going to be observed, they do not know how their creation is going to be studied which preserves the essence of the tabletop roleplaying experience. TAZ, in particular, exists in audio recording and in transcript, so there are multiple points of access to the content.

The newness of the McElroys to D&D is another advantage of TAZ, particularly at the beginning of the life of the podcast. This newness is the reason I chose TAZ over other, similar media like Critical Role, Dames & Dragons, or D&D is for Nerds. The Critical Role players, though unedited, operate on a level of mastery and production value that most casual tabletop games could never hope to achieve and are certainly not new to tabletop roleplaying. Likewise, the Dames & Dragons players came to podcasting with a great deal of prior experience with the
game. *D&D is for Nerds* would represent an appropriate alternative or additional case study as in the case of at least one player his first D&D game was recorded and released as the first season. However, in that podcast the players do not roll their own dice, and the final product is heavily edited (among others: Carnevale, Zammit, & Baly, 2017; Carnevale, Zammit, & Eddie, 2017). This makes it challenging to observe organic information behaviour. TAZ presents relatively new players working with 5th edition D&D, which is much more mechanically streamlined than previous editions, and therefore the information needs of the players, characters, and DM are not buried under confusion over game mechanics. While Travis McElroy came to the table with a bit of experience, he was by his own admission no expert while Justin and Clint McElroy had never played before.

Within TAZ, I have selected the “Murder on the Rockport Limited” story arc to set the scope of this investigation. “Murder on the Rockport Limited” is the first original story the McElroys told after starting from the published Starter Set and the second story arc aired in *TAZ: Balance*. The players and DM have at this point in the life of the podcast developed a good understanding of the game’s basic mechanics which removes the information needs associated with the “how do I play D&D?” class of questions asked of Dungeon Masters. Learning a new system of any sort is a valuable line of information behaviour investigation. However, for this project, I am most interested in how people seek information when they know some elements and are restricting themselves from using some part of that knowledge. This basic level of comfort with mechanics permits a focus on the process of navigating these dueling cognitive worlds. This arc is also in part a murder mystery and in part a search for one of the Grand Relics and is furthermore set on a train, so the information needs are clearly defined and bounded for the listener.

### 3. INSIGHT CHECK: THEORETICAL FOUNDATIONS

#### 3.1 The Small World of the Tabletop

In this examination of information behaviour, two existing theories will serve as the foundation: Small Worlds and Everyday Life Information Seeking. These theories best address the elements of the tabletop experience and the research process. Small Worlds explains the ways that information is limited in these contexts, and Everyday Life Information Seeking examines how individuals in these systems navigate those environments.

Given that one of the core aspects of a Small World is that insiders in that world shield themselves from needed resources and information technology, the game table is not evidently such a clear cut example (Chatman, 1996). One of the key aspects of preparation for the game is engagement with information resources and technology like the core books (the *Player’s Handbook* and the *Dungeon Master’s Guide*) and digital material either released by Wizards of the Coast (Unearthed Arcana) or by homebrewers in the community writ large. This would seem to indicate a reliance on resources and technologies external to the gameplay world. However, at the table once the game has begun, it is as if those resources did not exist. Exchanges like this one between Clint and Griffin are common in *TAZ*:

> “CLINT: I’m going to cast something that I think will be good for all three of us...’Cause that’s my nature. I’m gonna cast Tenser’s Floating Disk.  
> GRIFFIN: Are you sure that-- This- this sounds like a wizard’s spell.  
> CLINT: I have changed my mind about what I’m going to do.” (McElroy et al., 2015b)

The spellcasting classes in D&D have restrictions on which spells they can learn and how, which is information readily available in *The Player’s Handbook*. Clint, playing as Merle a Cleric of Pan, does not have access to Tenser’s Floating Disk, which is information that must come from Griffin, the DM, rather than a formal information source during normal gameplay.

To an extent, it is incumbent on the players to adequately prepare to play their characters. In preparation for the game, there are many tools available to organize the information your
character knows: spell cards, the character sheet itself, a spreadsheet, digital tools like D&D Beyond or Roll20, among others. One can liken this exchange to a student citing a forbidden source type in their paper. So to speak: the information about whether a website was acceptable as a source was in the syllabus, but the student did not read it. In this instance, the student was able to address the issue in office hours (Clint was able to select a different spell), but the arbiter of correctness had to weigh in. One can take the arbiter of correctness to be either Griffin or Wizards of the Coast in this instance, but that arbitration had to come from a source external to the student. Understanding the DM as the arbiter of correctness is necessary because there are frequently differences between what the players know and what the characters know. The DM must define the world. They do so in terms of what the characters know and what information is internal to that world. In the grey area where what the player knows and what the character knows are different, the DM plays a critical role in controlling and limiting the flow of information.

The secrecy and deception characteristics of a Small World are also present in this cognitive grey area. Secrecy in a Small World functions to protect the insiders from unwanted intrusion by outsiders (Chatman, 1996). It creates separation. In this theoretical framework, deception is the conscious effort to distort reality (Chatman, 1996). These aspects of Small World creation are both define the proscription around metagaming. In this linguistic framework, to metagame is when the world of the players intrudes on the world of the characters. It is when a player’s knowledge of the story and the mechanics of D&D breaks through. Metagaming is not the insertion of comedic references to shared cultural properties or even shared personal experiences; that is an accepted aspect of cross talk. Rather, it is the exchange of knowledge regarding stats, condition immunities or vulnerabilities, and the like that the characters would have no reason to know but the players do. Within Chatman’s definition of deception, the creation of the campaign itself is deception. Based on this conscious distortion of reality, the world of the game takes shape and is taken for real by the players and DM. The other salient aspect of Chatman’s definition of deception in the articulation of Small Worlds theory is that it hinders those involved in the deception from making use of relevant knowledge. Again, the fact that once at the table the players ignore information resources and technology for answering simple questions comes to the fore.

When fighting a fire-breathing crab without weapons, Magnus (played by Travis) takes a chair and uses it to attack the crab (McElroy et al., 2015e). In the game, Griffin and Travis discuss the stats for a chair and what kind of roll to make to attack with it. While this could be looked up in the core books or with a quick Google search, the two construct the in-game reality of hitting a fire-breathing crab with a chair:

“GRIFFIN: We’ll say this has the, uh, same characteristics of a club, I think that’s fair? I’ll say one d6, but because you’re so skilled in carpentry I imagine [Clint begins to laugh] that you’ve had to attack somebody with a chair before? So you definitely have expertise on this, that’s not debatable. And you also, like, are just really good at hitting shit with chairs, made out of wood, so I’m say one d8, you have, uh, expertise with it, uh, and I’m gonna give you a point of inspiration: A) for making a makeshift weapon, and B) for picking a makeshift weapon that is so completely within your wheelhouse.

TRAVIS: Thank you. Um, well, if I have expertise with it, then I rolled a seventeen plus six, so that’s twenty-three…” (McElroy et al., 2015e)

The reliance on the DM as the font of information in the world of the game and at the game table hinders the four from using readily accessible information resources. The risk of violating the social proscription on metagaming safeguards secrecy while the deception inherent in the collective storytelling format of the D&D campaign forces additional reliance on the DM as the sole font of information which deepens the insider/outside divide.
In the example of the fire-breathing crab, Griffin constructs a rule for the improvised weapon. What he decides is not strictly how the Player’s Handbook says a DM should handle an improvised weapon. Rules as written, the DM makes a call as to whether the object being used as a weapon is akin to an existing stat block (a fire poker might be likened to a spear or a club) and assigns the relevant bonuses, proficiency requirements, and damage die, or, if the object bears no resemblance to an existing weapon (a dead goblin is fairly unique unto itself as a weapon), it deals 1d4 damage of a type determined by the DM (Mearls et al., 2014). Griffin’s decisions here mark a departure from the rules as written. This choice renders the Player’s Handbook not entirely relevant to the world he creates with his family. Playing fast and loose with the rules like this is characteristic of TAZ and is not a bad thing. However, it does widen the insider/outside divide and makes the Small World even smaller.

This process transpires in much the same way that a teacher shapes the range of sources available to their students. When professors and instructors limit their students to “only scholarly sources” or “at least one book and at least four articles,” they shrink the information world available to their students. Like playing fast and loose with the rules as written in D&D, this is not a bad thing. It serves a valuable pedagogical purpose. Limiting the range of sources can teach students about authority and credibility. Nevertheless, it also shrinks their information world. Calling a source type unacceptable for a project is a distortion of reality. This is not a pejorative assessment. It is not inherently wrong to shrink the information world of students. But it is a distortion nonetheless. Just as the game takes shape in the conscious distortion of reality created by the DM and the characters to tell a story, so too do assignments take shape in the conscious distortion of the information landscape created by instructors and professors to teach their students. To comply with source type requirements, students perforce shield themselves from available information resources. It may be that a web forum, a blog post, or personal experience would speak to their paper topics, but in the Small World of instruction those may not be true options.

3.2 Everyday Life Information Seeking at the Intersection of Reality and Fantasy

How then do the players and their characters navigate this small and shrinking world? Savolainen in the first articulation of Everyday Life Information Seeking defines that theory in terms of way of life and mastery of life (Savolainen, 1995). Way of life as a concept speaks to the priority given to different elements of an individual’s life. This order of elements is determined both subjectively and objectively: the length of a workday only leaves so much time for hobbies while choosing what to do with that leisure time is more subjective. Putting things in a meaningful order is then considered mastery of life. When the order of things feels satisfying, coherent, and manageable, one has attained mastery.

When confronted with an active crime scene on the Rockport Limited with one dead person and a second unconscious individual, Taako, Merle and Magnus are called to “get NCIS on this shit” (McElroy et al., 2015e). This exhortation from Griffin can also be interpreted as a call to life mastery (Savolainen, 1995). The order of things has been shaken. What was first a mission to retrieve a package from a train is now an active murder investigation which requires the characters to actively expend effort to restore the sense of coherence in the initial outline of the mission. This articulation of the information need is notably in terms of the characters’ needs. The players have a different sense of what coherence might be: solve the quest (which encompasses both seeking the Grand Relic and solving the murder with no real weight given to one over the other) and level up.

Chatman, writing with Huotari, does apply Everyday Life Information Seeking to the Small World context, noting that the shared assessment of the world articulates what is essential and appropriate to reassert life mastery (Huotari & Chatman, 2001). However, at the game table, the interaction of the players' sphere and the characters' sphere destabilizes this framework. Their
assessments of what a stable world would be conflict. It is not enough to say that information behavior can be predicted based on the norms of insider behaviour unless disrupted by an outsider (Huotari & Chatman, 2001). Rather, the disruption which for the players is corrected by the completion of the story and for the characters by solving the immediately apparent mystery or quest, comes from within the system. Specifically, it comes from the DM, an insider.

This destabilization from within is a norm for the game table. The base structure of a D&D campaign is that some group of characters created by some group of players reacts to some conflict or call to action introduced intentionally by the DM. Moreover, the structure of D&D requires reliance on character skills over those of the player. This challenges the Everyday Life Information Seeking typology of factors that influence life mastery. In that schema, individuals are oriented on a cognitive/affective dimension, which indicates the degree of objectivity and subjectivity applied to a destabilization of life mastery, and an optimistic/ pessimistic dimension, which describes the degree to which a problem is considered solvable (Savolainen, 1995). The context of D&D challenges the cognitive/affective mastery of life typology because D&D demands realistically fantastical thinking for roleplay purposes. Moreover, players cannot avoid risk or failure because the game could not continue without some level of risk. The impetus for seeking information demands, to an extent, an optimistic-cognitive or pessimistic-cognitive mastery of life typology (Savolainen, 1995). The context of the classroom similarly excludes two permutations of this typology. The spectre of one’s GPA demands a cognitive approach, while one’s interest in the class topic defines the degree of pessimism or optimism involved.

In the frame of TAZ, this problem can be understood in terms of two series catchphrases: Justin’s “Taako’s good out here” and Travis’ “Magnus rushes in.” Both accept that a non-optimal solution to the problem at hand might be the most appropriate solution in the moment, but the first reflects a more carefully considered approach while the second reflects a more energetic but less systematic approach. To be good out here is to be satisfied with passively finding a solution. To rush in is to take the first possible solution encountered. These recast typologies highlight the issues with the Everyday Life Information Seeking theory. The social aspect of information seeking is lost in the reduction of information seeking typologies to four possible combinations of cognitive-affective and optimism-pessimism. The act of typifying is helpful. Simplifying methods to types helps develop services that reach a broader swath of people because they anticipate possible needs. However, based on our examination of the Small World of the tabletop, it is clear that a more nuanced, more social understanding of everyday life is necessary.

4. WISDOM SAVING THROW: A NEW PROPOSAL
The game table is marked by the characteristics of a Small World while the players at that table are best understood in terms of Everyday Life Information Seeking. The insider/outsider structure of DM/players and players/characters restricts the information available. Navigating these multiple dimensions of insider/outsider identity in terms of Everyday Life Information Seeking illuminates the intersection of practical need and emotional fulfilment, but does not entirely draw out all the relevant nuances. These types do not fully illuminate the socio-cognitive dimension of information behaviour, especially not for students. I posit that it is more effective to add a distinct social dimension to a typology to understand the behaviour of the students and users approaching the reference desk. This addition makes it possible to more clearly see how members of a Small World (whether a game table or a classroom) interact with outsiders in the information seeking process.

4.1 Information Alignment
In order to begin to propose a new typology based on this investigation, it is instructive to return to one of the core concepts of D&D: the alignment chart. A simple 3x3 grid, the alignment chart maps a character’s worldview on the axes of good/neutral/evil and lawful/neutral/chaotic. The first captures external influences (relationship to society) and internal (moral) influences on how
characters approach problems (Mearls et al., 2014). Taako is “good out here” because of his Chaotic Good outlook: he acts “as his conscience directs with little regard for what others respect” (Mearls et al., 2014; The Adventure Zone, 2014). Such a character in the Everyday Life Information Seeking typology would straddle multiple types with his positive conception of his intellectual abilities, reliance on wishful thinking, and belief that he can contribute to an optimal solution to a given problem. A hypothetical individual of a Lawful Evil Information Alignment would be one in which the seeker methodically goes after their goal with little regard for morality but high regard for how they might be perceived by society.

Such a user would be concerned with the answer and how they appear to have gotten it. This alignment might mimic a student under a tight deadline most concerned with their grade. In contrast, a Taako-style approach would be more leisurely and self-motivated, mimicking someone working on a passion project.

An information alignment chart would then begin to take shape along these lines:¹
- **Lawful**: putting external forces and evaluators first over personal wishes
- **Chaotic**: emphasizing internal forces over external expectations
- **Neutral**: acting on what seems best at the time either internally or externally
- **Evil**: acting with little care for the process of research, just needing to get it done
- **Good**: acting such that one is personally satisfied with both method and product

I do not mean to suggest that this typology is perfect or even finished. However much I might say that defining information behaviour as in any way “evil” is not meant to be pejorative, it is hard to avoid the actual connotations of the term. This typology is sketched out to expand our ways of understanding information behaviour in terms of how an individual library user encounters our resources and services both internally and externally; in terms of how that user structures their inquiry and the demands of instructors, bosses, and other external arbiters of mastery.

5. PERSUASION CHECK: CONCLUSIONS

The scope of this initial examination has been significantly limited. The context of relatively new players on an actual play podcast, while instructive to begin this conversation, leaves many more avenues for future research. Within the larger picture of *The Adventure Zone* alone there is the opportunity to track how players gain expertise in a system as they play more and their characters level up. The question of the additional Small World of editing the podcast remains. In *D&D is for Nerds* the podcasters have on several occasions gone back and rerecorded scenes so that they were happier with the story they released. *Critical Role* gives us the opportunity to examine expert level players switching roleplaying systems in an entirely unedited programme. This is to say nothing of the opportunity to refine the Information Alignment Chart by observing both live D&D and real students.

However, from the synthesis of Small Worlds theory and Everyday Life Information Seeking, it is clear that we need to take the social dimension of information seeking more seriously as we develop types to evaluate user needs and assess services. The social dimension is essential to capture in the context of the Small World because it gestures both to why a member of a Small World might venture beyond the bounds of the Small World and how they might act when they get there. By examining the Small World of the tabletop, it is possible to begin to peel back the layers of social interactions between the spheres of the player, character, and DM to highlight the need for a typology that is conscious of the way multiple identities interact. Typologies themselves are not useless, but they must take into account a more expansive suite of factors.

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¹ For proposed definitions of each combination of these alignment elements see (Eames, Oct 13-17, 2020)
6. LITERATURE


ALLEVIATION OF LIBRARY ANXIETY THROUGH INFORMATION LITERACY TEACHING

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ABSTRACT

Obtaining information literacy skills is crucial in order to live, learn and work in today’s constantly changing information environment. Libraries, especially academic ones, should be the focal point of learning those skills. Some of library users feel library anxiety and therefore they are not able to use full extent of library services and cannot develop adequate information literacy skills. In this paper authors have tried to provide an insight on alleviating library anxiety through information literacy teaching. By analyzing and summarizing existing scientific literature it is proven that information literacy courses have negative impact on library anxiety and that library anxiety can be reduced by creating and implementing information literacy courses.

Keywords: library anxiety, information literacy, bibliographic instruction, library users

INTRODUCTION

The term anxiety is primarily used in psychology and describes a state of fear or unease that individual may experience in certain situations. It can be manifested by various subjective and physical characteristics (Rathus, 2000). Main subjective and physical characteristics of anxiety are fear that something terrible will happen, restlessness and inability to relax, while the most common physical characteristic include rapid heartbeat and breathing, increased sweating etc.

Taking into consideration these characteristics, it is obvious that anxiety is a state in which individual is not able to perform tasks or function in certain situation at an optimal level (Vulić-Pトリć, 2003).

The purpose of this paper is to provide an insight on the connection between information literacy and library anxiety and on the options available to librarians for alleviating library anxiety among users by creating, implementing and evaluating bibliographic instructions sessions.

The goal of this paper is to raise awareness of the library anxiety occurrence and its alleviation among interested librarians, patrons and LIS scholars.

LIBRARY ANXIETY

Library anxiety is a form of situational anxiety (Mech & Brooks, 1995; Jerabek, Meyer & Kordiniak, 2001) and it is a part of a broader construct of academic anxiety. Academic anxiety is defined as a fear of academic obligations and it is manifested by academic procrastination and feelings of apprehension towards academic obligations (Hooda & Saini, 2017). Most students who experience this type of anxiety tend to have poorer results and are more prone to academic procrastination than peers who do not experience academic anxiety (Hen & Goroshit, 2014).

As noted before, library anxiety is a form of situational anxiety because it occurs only in situations when user contemplates about using the library or uses the library at the moment when anxiety arises.

The problem of students’ fear of the library was first documented by Mellon (1986) after she concluded that 75-85% of students surveyed expressed feeling of fear and anxiety when they needed to use the library. Linking the results of her research with the already known concepts of math and exam anxiety, Mellon coined the term “library anxiety”.

The work of C. Mellon is the first formal study on library anxiety (Van Kampen, 2004) and to this day there is emerging body of literature regarding library anxiety theory, measurement and alleviation (Jacobson, 1991; Bostick, 1992; Shoham & Mizrachi, 2001; Van Scoyoc, 2003; Onwuegbuzie, Jiao & Bostick, 2004; Carlire, 2007; Swigon, 2011).
The most prolific researchers of library anxiety, Qun G. Jiao and Anthony Onwuegbuzie, who have published more than twenty scientific papers on library anxiety (Vernon, Evans & Frissen, 2016), define library anxiety as a feeling of discomfort and concern that occurs in library environment and is manifested by physical, cognitive and social characteristics (Jiao & Onwuegbuzie, 1997).

Kuhlthau (1988) developed a six-stage ISP and concluded that feelings of fear, uncertainty and frustration are natural occurrence during the information retrieval. These feelings can impair existing skills and make it more difficult to acquire new ones needed to develop information literacy (Jiao & Onwuegbuzie, 1997).

Correlation between library anxiety and information literacy is also pointed out by Battle (2004), Kwon, Onwuegbuzie and Alexander (2007) and Birch (2012).

All these authors concluded that user education, based on teaching and developing skills of critical thinking, which is an integral part of information literacy, reduces library anxiety. This is confirmed by Gross and Latham (2007) and Kwon (2008) who developed model of the relationship between critical thinking skills and library anxiety.

ALLEVIATING LIBRARY ANXIETY

Library anxiety can be induced or diminished by factors that can be directly influenced by librarians (Black, 2016).

One part of the user frustration stems from the cognition that certain information is available in the library either in print (book, journal) or in electronic form (on-line catalogue, database) but they do not know how to find it. Lack of searching and information evaluating skills can cause sense of inferiority and impaired self-confidence among users and such users may begin to feel reluctant to use the library.

Bearing in mind that development of information literacy and critical thinking in users reduces the possibility of developing library anxiety (Jiao & Onwuegbuzie, 1997), the most straightforward and effective way to prevent or alleviate library anxiety that occurs as a result of lack of searching, evaluating and proper information usage skills, are bibliographic instructions that have proven to reduce library anxiety and improve information literacy skills (Mellon, 1986; Kuhlthau, 1988, 1991; Vidmar, 1998; Battle, 2004; Gross & Latham, 2007; Carlire, 2007; Kwon, 2008; Birch, 2012).

Although library instructions are offered in all types of libraries, they are of great importance in academic libraries since the academic success of students directly depends on the skill of using library information sources (Jiao & Onwuegbuzie, 2002).

The benefits of user education are twofold. First, users become information literate and can use the acquired skills, not only in the library, but also in meeting all other information needs, and second, the implementation of educational programs in the library has been proven to reduce library anxiety (Van Scoyoc, 2003).

Some universities have implemented library of bibliographic instruction sessions in their curricula (Van Scoyoc, 2003) and these courses can be elective or compulsory. Bearing in mind that progress made in evolvement and availability of information technologies and information resources has dramatically changed all information activities (Saracevic, 2007), it goes without saying that the nature and models of bibliographic instructions have changed, as well.

Although traditional bibliographic instructions are being augmented, or in some cases, replaced entirely by computer based instructions, Van Scoyoc (2003) points out personal contact between librarian and user during bibliographic session as crucial.

As Van Scoyoc (2003) finds, students who were taught bibliographic instruction by librarian tend to report significantly less level of library anxiety than their colleagues who attended computer-assisted instruction.
Despite the fact that technology has been a driving force for changing the nature and model of bibliographic instructions, when it comes to library anxiety, the best way to prevent and alleviate it through bibliographic instructions is when they are led by a librarian. Before, during and after librarian-led bibliographic instruction session, users can ask questions, ask for additional explanations and share their insight. Also, this kind of instruction gives librarian an opportunity to present themselves as an empathetic, accommodating and professional individual.

This is also confirmed by Fiske, Cuddy and Glick (2006) according to whom users tend to judge warmth of the librarian before competence. Vidmar (1998) reported that students who were exposed to short 10-20 minutes pre-session, before bibliographic instruction session, felt better about the library and librarians. Kracker (2002) studied the effects of a 30 minute presentation of Kuhlthau’s ISP and found that 30 min. presentation can significantly reduce users’ anxiety.

From the examples stated above two main conclusions can be drawn. Firstly, information literacy teaching and development of information literacy skills prevents development of library anxiety among users. Secondly, it is evident that computer bibliographic instructions, no matter how well designed they are, cannot replace bibliographic instructions led by a skilled librarian, especially when we take into consideration that discovery systems, on which computer based bibliographic instruction rely heavily, may not be intuitive as we think (Dahlen et al., 2020). Finally, human interaction is necessary and not even the best computer can replace it (Katz, 1992).

CONCLUSION
With this paper, once more we tried to explain the importance of information literacy teaching when it comes to alleviating library anxiety. A thorough review of scientific literature used while writing this paper has unequivocally proven that library anxiety is a real occurrence and that it has a negative impact on the physical and emotional well-being of users and on their academic success, as well. Nevertheless, library anxiety can be alleviated. Librarians can take a number of different actions in order to alleviate library anxiety among users. In our opinion, information literacy teaching through individual and group bibliographic instruction is the most efficient and straightforward. Authors completely concur with the conclusions made by numerous authors according to which developing information literacy skills has negative impact on library anxiety. In other words, information literate individual is less likely to be library anxious than the individual who is not information literate.

Lastly, the utmost important role through every procedure undertaken in order to alleviate library anxiety among users is the role of the librarian. Librarian who acknowledges existence of library anxiety as a real issue and at the same time who is friendly, communicative and skilled is a key factor in alleviating users’ library anxiety.
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THE ROLE OF LIBRARIES AND INFORMATION CENTERS IN DISASTER MANAGEMENT

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ABSTRACT
Libraries are important organizations in our lives. They can even have life-saving roles during crisis and disasters. They not only provide information and information resources for people but they can also be a house and shelter for people where they can come during crisis moments. This paper will put forward the role of libraries and information centers in disaster management.

Key Words: Library; Information Center; Disaster Management

In the changing world, the roles attributed to public libraries also vary. Information centers, where information resources, collections are stored, shared with other people, and play an active role in people's access to information resources, have started to take on new roles within the scope of social service by adapting itself to changing conditions as users' information needs and information seeking behaviors change. Information centers and libraries aim to minimize the challenges faced by citizens by starting to take active roles in disaster management. Libraries and librarians play roles in resolving crises in man-made or natural disasters. Librarians now serve as information experts, researchers, educators, psychologists, coordinators, and public relations officers (Rattan, 2013). Readiness for a possible disaster and taking necessary precautions will ensure that the crises that may arise in the event of disaster are minimized. The establishment of policies and strategies for disaster management by institutions will facilitate the process of preparedness for a possible disaster. The disaster control plan has four stages such as prevention, readiness, response and recovery (Rattan, 2013). Eden and Mathew (196) describe the disaster as an event that threatens human life or damages library buildings, collections, equipment and systems. The Library and Information Services Unit also defines the disaster plan as written rules for dealing with unexpected events and situations that may damage library staff or items, information resources and collections in the library.

Disasters are divided into two as human-caused disasters and natural disasters. Natural triggers of disasters can be changes in climate and weather. There may be cloud, rainfall, dust storms, avalanches, drought, earthquakes, floods, tsunamis, storms, landslides, uncontrollable fires, tornados, volcanic eruptions. Disasters caused by humans may be caused by the low quality of the building and the material used during the construction of the building. Disaster types such as theft, brutality, arson and theft are among the types of disasters caused by humans (Rattan, 2013). Disasters are events that shake and deeply affect human life. It leaves physical, physical and spiritual effects. The important point is to improve these effects and to minimize their effects. From this point of view, disaster management is an important concept to consider.
Purpose of the study

The aim of this study is to reveal the importance of the role of libraries in disaster management and to share the model service implementation of libraries that have assumed responsibility in disaster management and supported the public in counseling, access to information services, communication network and asylum.

Disaster Management and Information Centers

Disasters have become common occurrences due to changing geographical conditions and increasing environmental factors. It is of vital importance to control the consequences of disasters and manage the crisis. Different institutions and organizations have various roles and responsibilities in order to improve the general situation and results after the disaster and to produce the necessary solutions. One of these situations is the library and information centers as an information services provider. These institutions are the cornerstone of society.

Public libraries are institutions that assist individuals in disaster management and meet the public's information needs. Considering the society's needs such as communication, access to social services and information, it is striking how important the role of public libraries and information centers is (NLM, Disaster Health Information, 2017). These needs are among the secondary needs of individuals after food, water and shelter needs (See Figure 1).

The duty of libraries and information centers to meet the information needs and to provide information services to the public is a critical role that must continue during and after the disaster. Public libraries are a relaxing place for victims of the emergency. The Federal Emergency Management Authority (FEMA) has highlighted that libraries should have a role, such as an information and refuge center in disasters, natural disasters and emergencies, and identified one of the new roles of public libraries (Kelley, 2012). It was emphasized that cooperation should be made with libraries to prepare for emergencies and disasters. In some libraries, informative and practical awareness trainings are given to the personnel on first aid services (Malizia, 2013).

Figure 1. People's Primary and Secondary Needs (NLM Disaster Health Information, 2017).
LITERATURE REVIEW

The Yokohama Strategy and Action Plan was the first plan to guide disaster mitigation policies in 1994. Another one was the international strategy for disaster mitigation (ISDR) in 2000. Also, the Johannesburg Action Plan aimed to enable the disaster management in the concepts of vulnerability, risk assessment and disaster management in 2002. In 2005, important steps were taken in terms of Hyogo Action Plan and Kobe Conference for raising the awareness of societies against disasters, and the global platform meeting for disaster mitigation in 2007 (Kuterdem, Akin, & Nurlu, 2009).

There are different types of crisis situations in different parts of the world, from social turmoil to simultaneous wars. As societies tackle with these challenges, public institutions take responsibility for helping disaster planning. There are numerous examples of the positive role public libraries play during disasters and natural disasters (Flaherty, 2016). In the United States, the Federal Emergency Management Agency (FEMA) has now emphasized that public libraries are another important service area (Dickerson, 2007).

American Public Libraries are often used as shelter and shelter in emergencies. After the sandstorm, Princeton Public Library in New Jersey and New Canaan Public Library in Connecticut gave citizens the opportunity to communicate with their loved ones, acquaintances and families. Some public libraries have done more than this. Roxbury Public Library opened early and closed late at night. In August 2014, Ferguson Municipal Public Library helped those who wanted to take shelter as a safe center during the chaos after the murder of an unarmed person named Micheal Brown (The Conversation, 2017). Other examples belong to the public libraries in Middletown, Newburgh, and Orange counties. Addicted individuals who use high doses of drugs take shelter in the library. The library also plays an important role in saving people's lives. Special training programs are implemented for librarians so that they can intervene immediately (HVNN, 2017). Another case was in Puerto Rico in September 2017. With the hurricane, there was a natural disaster caused by wind and rain. All communication channels, including radio, television and the Internet, have been cut off. The library has endeavored to provide communication support to the public. In 2015, a massive flood occurred in North Carolina and caused great damage to the environment. The library has made great efforts to support the citizens. The library enabled the use of the Internet. In addition to the library, social media also served as an information channel to provide real-time information services (Tu-Keeffner, 2015). Public libraries supported disaster management in the Atlantic storm in the United States in 2005 and the Twin Towers terrorist attack on September 11 in 2011 (Featherstone, et al.). Another example is from New Orleans. People who use lethal doses of drugs take shelter in the library. More than 50 volunteers working in 14 branches in the New Orleans Public Library help drug addicts (WGNO, 2017).

It is highlighted in the literature that libraries play an important role in disaster planning, responding to disasters and improving the resulting damage. Librarians are also treated as the ones who support people and who actively contribute to disaster and crisis management during emergencies. The National Library of Medicine stated that libraries perform life-saving duties and responsibilities during disaster planning. In order to reveal the role of librarians in disaster management, surveys were conducted with academic, hospital, public and private librarians. In addition, the opinions of non-librarians but experts from different branches were sought. Participants were asked various questions about disaster planning, the readiness of libraries for disaster planning, appropriate response of libraries during a disaster, and their ability to meet urgent information needs in the event of a disaster. The study was conducted between 31 May and 3 August 2017. The questions managed in the survey are given below:

- What was the reaction of the library? What happened to the librarians' reaction to the incident?
- What are the extraordinary roles the librarians performed during the incident?
Has there been any change in the library's services after these events?
What kind of incident occurred in the area where you live (for example, what was the disaster or emergency?)
In your opinion, what are the responsibilities and duties of libraries and librarians in disaster planning, responsiveness and remediation and recovery?

Librarians gave different answers to the questionnaire questions. Answers range from designing information tools to offering shelter support. Librarians who stated that they worked in different institutions such as California State University, Central Memphis Public Library and Information Center, Texas Medical Center, Houston Medical Academy, Illinois Fire Services Institute, Illinois University, Louisiana State University, New Jersey Hospitals Association, He stated that disasters such as storms, floods and epidemics occurred. As a result of the survey, it was determined that different roles were attributed to librarians. It was concluded that academic libraries were institutional supporters, provided shelter services to students and information professionals (doctors, nurses, faculty members, other researchers working within the university) who were homeless during the disaster, collection managers protect the collections and provide access to collections and resources. It has been stated that librarians are experts who provide information, disseminate information, contribute to the disaster management process by sharing accurate and reliable information, are good planners, and enrich library activities by being a center that delivers help to people. Libraries also offer support as a shelter and communication center, send portable units to shelters, offer volunteer assistance in disaster management, manage donations, provide emotional and psychological therapy support, support individuals in finding their families, finding jobs, social assistance and apartments, and pets. It has been reported to assist in providing and finding shelter support, medication and prescriptions (Featherstone et al., 2015). It was stated that libraries make action plans to prepare themselves for disaster management, cooperate with other institutions and organizations, and encourage their personnel to participate in emergency and crisis management trainings, seminars and workshops. Librarians also participated in training on the use of information tools. Educators also gave lectures on disaster management competencies in classrooms. Educators and libraries provided support for the preparation of technological infrastructure for disaster management.

CONCLUSIONS AND SUGGESTIONS
The roles and responsibilities assigned to libraries and librarians are increasingly different. One of the new roles and responsibilities of libraries and librarians has been disaster management and crisis management. Libraries have started to function as a support center in order to help the public and solve the crisis in natural and man-made disasters, moments of crisis and social turmoil in different countries. When the cases in the literature are analyzed, the library functioned as Internet and Computer Center, the social center where people can express themselves and share their troubles and problems mutually, neutral buffer zone, area, food, shelter, emergency management center that provides consultancy services. It has been concluded that it functions as an information provider and information service provider that transmits instant accurate information, a warming center during crises in cold winter days, a cooling center in crisis situations on hot summer days, and a center that prepares accurate news from accurate information sources documenting the events. Libraries also play the role of relaxation therapy centers. Libraries around the world have strived to provide the fastest assistance to individuals and have collaborated with other institutions. In order to determine the roles of libraries and librarians during the disaster, different people and institutions were surveyed and the opinions of relevant experts were sought. It has been concluded that libraries have an important role in crisis management.
Suggestions presented within the scope of the study are given below:

- It may be beneficial for public, school and academic libraries to cooperate with other institutions on disaster management and to produce solutions by mutual negotiation.
- Libraries should be able to carry out physical and technical infrastructure studies on disaster management readiness; they should have technical equipment that can make appropriate intervention during a disaster.
- It may be useful for libraries to train their users and employees on disaster management.
- It may be useful for libraries to conduct earthquake drills with their staff and to prepare bags in case of an earthquake disaster.
- It is important that libraries systematically organize workshops and meetings on disaster management and raise awareness of their employees.
- Libraries are recommended to use technologies such as early warning systems and remote sensor control.
- It may be beneficial for libraries to strengthen their communication and Internet infrastructure.
- It may be beneficial if the library provides disaster management and crisis management training against possible scenarios, taking into account the geographical conditions of the region.

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CROSS-SECTORIAL AND INTERDISCIPLINARY COLLABORATION AND PARTNERSHIPS FOR THE ADVOCACY OF INFORMATION LITERACY: THE NATIONAL LIBRARY BOARD, SINGAPORE EXPERIENCE WITH THE S.U.R.E.

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ABSTRACT
The S.U.R.E. (Source, Understand, Research, Evaluate) campaign is the national Information Literacy framework of Singapore. Since its inception, the National Library Board, Singapore (NLB) had collaborated and partnered with organisations across different sectors in Singapore. The S.U.R.E. framework has been used in a variety of environments, ranging from school outreach, public education, digital readiness to national security, and for audiences ranging from young students to working adults and senior citizens. The speakers will also share how NLB has collaborated with its partners to adapt and embed Information Literacy in the national school curriculum, the nation’s Total Defence framework, as well as the recent national Digital Media and Information Literacy Framework and workplace digital literacy and digital readiness programmes.
ABSTRACT
The age of the information and knowledge competences forces us to change the traditional teaching methods used in the past. Thus, we find that scientific research has become the most important of lifelong learning in the process of teaching at the university colleges. This will increase the role of the library more than ever before, it is an important pillar for students to obtain sources of information, that its role is not limited to the library only, but to the librarians who strives to work hard. In addition to the role of librarians in the educational process in developing the information literacy skills of teachers and students. The importance of this study is demonstrated by the need to determine the extent to which Zayed University community benefit from the program of information literacy for students of Arabic language and Islamic studies. Workshops for faculty members have been provided through educational methods of teaching and how to develop them in the future to support the educational process.
To verify the hypotheses, the researchers used the descriptive method, a random sample of students and faculty have been used in the questionnaire from five axes: measuring the extent of the librarians’ knowledge of the required information, the range of satisfaction, the explanation used, the time of the workshop, and the overall satisfaction level of the workshops. The questionnaire was sent by email to students and faculty who’s attended the workshops; and the researchers could obtain the response of 46 female students and faculty members from the Faculty of Arabic Language and Islamic Studies. The results revealed that 93% of the respondents expressed their satisfaction with the accuracy of the required information and the extent to which they were able to explain. 84% of respondents expressed their satisfaction with the information of the presenters about the workshops provided. while 80% of the respondents expressed their satisfaction with the time spent on the workshop ranged from (fully agree and agree), and 97% of the respondents felt that the overall level of the workshop was between (very excellent, good and Very good), and the information provided in the workshop was given about 93% of the total percentage of their satisfaction the answers ranged between (fully agree and agree).
Based on these results, the researchers came up with a recommendation according to the attention of Library and Learning Commons in continuous communication with faculty members, to activate information literacy programs for students and develop the skills of librarians and the reference technician, to acquire up-to-date skills and practices that are capable to teach information literacy skills in the future scientific research approaches.

Key Words: Information Literacy, Academic, Teaching, Workshop, Librarians, Zayed University

INTRODUCTION
In these days there are a lot of Information technology changes and the ways of teaching. So All the Academic and Educational institutions need to take care of the information literacy skills for their students, researchers and the faculties, And create an information literacy program for all the level of the Academic community to be able to access and get more information within all of that huge information available for the users, and the academic users need to be able to evaluate the information and differentiate the reliable information for their research. We have a great influence on the revolution of communication and information on societies to take their hand on the path of progress. Information literacy has varied between the literacy of dealing with tools, the sources of information, dissemination, technology and critical thinking skills, thus preventing researchers from falling into the trap of academic plagiarism. Therefore, it has become the pillars of
information literacy, understanding the flow of information, selecting, evaluating and monitoring data, as well as discussing, extracting, arranging, integrating and documenting information.

The vision of the information literacy program awareness in Zayed University Library and Learning Commons is to provide Zayed University community with the skills and knowledge necessary to determine the level of success. This is combination of skills and knowledge known as "information literacy". The program is designed within the specific cultural context of the United Arab Emirates, of which Arabic is the first language, to meet the needs of students in the process of scientific research and knowledge in general. This study will begin by providing an overview of the information literacy program model and reviewing the relevant programs in the academic field, and then using the field survey method to obtain results from the audience to evaluate the use of this program and study how to develop it in the future.

INFORMATION LITERACY AT ZAYED UNIVERSITY

California Library association has defined information literacy as it does not only mean literacy of computers but is defined by four elements: literacy, computer literacy, multimedia literacy, and network literacy to access and retrieve information (Dia, 2012). Therefore, through this definition we find that the use of information awareness is not relying on electronic devices only, but there are elements that must be integrated in order to achieve the efficiency and effectiveness of the researcher.

The importance of information literacy in critical thinking, which is a basic skill acquired by students during their academic study at the university; therefore, the International Federation of Library Associations (INFOGRAPHIC) to deal with the media and information literacy, and the discussions about fake news led to a new focus on information literacy And the role of libraries and other educational institutions in carrying out educational work and highlighting their importance and advocacy critical thinking, which is a crucial skill in the mobility of the information society to make the world more wise and revealed the fake news through the following steps: going beyond the source, read more, fast search for the author, additional references, make sure of the date, make sure that you are not biased, and ask the experts (Robertson, 2018).

The researchers contacted faculty members to determine the training time by attending classes where students are studying in the second-year course in Islamic civilization. Or by reserving one of the library's teaching rooms equipped with computers connected to the Internet and a display screen. The duration of the workshop ranged between 20-30 minutes at the beginning of the lecture and then the teachers complete their pre-prepared lecture program. There is a research material that is considered a requirement of the Islamic civilization curriculum, which includes giving a historical background on Islamic civilization, starting with discussing the main turning points in Islamic history. The faculty members have developed various topics for students, for instance: contributions of Muslim scholars to human civilization, Andalusia, Islamic architectural heritage, etc. So, they choose what suits them in the search process and choose a source of books that address these topics and then read and write a review of the book. Here lies the role of librarians in introducing methods of searching for these sources of books available in library collections.

Students and faculty members were taught in a practical way how to access the Zayed University e-Library website and search for information from print and electronic books; The first step was to search for print books through the OPAC library catalog, search by title of the book (if there is a specific title), search by author, key word, subject headings, then find the book call number for reviewing. The second step is to train students on online research in four Arabic databases: Al-Manhal, AskZad, Ebook (Ebesco) for Arabic books, and using both approaches, a wide range of information sources has been obtained covering these topics, and the workshop participants relied on the method of asking questions about the titles of books and subjects and interacting
with students during the workshop session, which received the approval and participation of professors of Islamic civilization, and the number of attendees 305 students for a total of 14 workshops. These short-term identification tours or workshops if true This is the first step to introduce students to information, which will contribute effectively in the long term to establishing information awareness, training of mind and self, and the importance of information and their necessity in scientific research and all aspects of life. Which will help them to meet the challenges of scientific research in obtaining sources of information, and to build their inspiration to do research and investigation in the future.

On the other hand, a training workshop was held for the professors of the Department of Islamic Studies in the two campuses in Abu Dhabi and Dubai to be fully aware of how to search for information and new databases and to help obtain information. Librarian offered this training workshop, which is about 45 minutes. Duration the workshop faculties used their computer available in the classroom or on his / her own machine. We introduce the staff of the library and those who are ready to help them communicate directly via the Internet and introduce them to the electronic library index. Explaining the call no., how to find books, and then introduce them to databases of Arabic or foreign books that can serve them in their research sector. There are many Arab databases (Ebesco, AskZad and Al Manhal) with some practical exercises during this workshop to consolidate the information.

THE IMPORTANCE AND OBJECTIVES OF THE STUDY

The importance of the study: The importance of this study is to focus on the importance of information literacy among faculty members in the Department of Islamic World Studies, one of the departments of the Humanities and Social Sciences college at Zayed University, as well as for students enrolled in the second year of study. The training doses in Arabic, which has a significant impact on raising their educational competence and research skills that lead to raising their academic qualifications and avoid falling into academic plagiarism. It also promotes the practice of critical thinking and practical skills in its students and avoid the use fake electronic sources. It is also considered the first study to discuss information literacy to serve the educational process, especially for Department of Islamic Studies, whether students or professors at Zayed University, and the session taught in Arabic by the reference technicians.

Study Objectives: The objective of this study is to identify the knowledge and awareness of faculty members and their students at the Department of Islamic World Studies at the Faculty of Humanities and Social Sciences at Zayed University for Information Awareness. The objectives were summarized as follows:

1. Enriching and enhancing information awareness among students and faculty members at the Department of Islamic World Studies at Zayed University.
2. Provide suggestions and recommendations that contribute to improving the teaching of information literacy skills.
3. Provide a new perspective that takes into developments in the field of information literacy.
4. Studying the possibility of designing an effective program for information literacy in Arabic.

Study Questions: This study attempts to answer the following questions:

1. What is information literacy?
2. Measuring the extent to which students and faculty members of the Department of Islamic World Studies at Zayed University are familiar with the skill of electronic research.
3. What methods are used to promote and develop direct access to print and electronic resources?
4. What are the future proposals for academic libraries to develop the skills of information literacy among students and faculty members of the Department of Islamic World Studies at Zayed University for the proficiency of electronic research?

**Study Methodology**

The descriptive methodology was used to obtain the required information and data and to ask proactive questions so that researchers could obtain answers through the survey method and collect the data from the sample of the community of Zayed University students at the second level to find out how they benefited from the material provided. The questionnaire was designed for its efficient and effective availability of sample data collected in a short time.

The second tool used is to analyze the content of the results recorded in previous studies on teaching the subject of information literacy in universities and review all its aspects. This provides detailed results on the actual reality of the subject of teaching information literacy. The process of description method is an important step to identify the ways of teaching information literacy in the academic areas in the Arab countries, through the readings and survey of researchers on a range of previous studies in the field of libraries within all of the large amount of information so that researchers can evaluate this information and how to use them in the development of methodology.

**Previous studies**

Through the reading and research of researchers of a series of previous studies on the teaching of information literacy for students in the field of libraries, we found that the subject of information literacy in the libraries of the Arab countries is one of the most important modern topics and takes a broad course for its development by librarians such as guidance, On the skills of information; therefore, different attempts have been made from studies and research to clarify the nature of the information literacy and its impact on the beneficiaries by the students of the bachelor's or postgraduate students or faculty members, despite the scarcity of Arab studies that have been discussed at this subject. Therefore, we have also move forward to fill this gap and provide training courses for faculty and students.

The experience of Zayed University is one of the most interesting experiences in the academic field in the United Arab Emirates. This is a study by our former colleagues Birks & Hunt (2004) of libraries and learning resources at the university about the information literacy program and how to make the most global standards in designing programs for information literacy is a set of ideas that can be used when creating, developing or evaluating an information literacy program. This program provides a framework for developing a detailed work plan for a specific program that can be applied in any academic institution. The researchers benefited from this program in the procedures of cooperation with the faculty members and coordination to evaluate our experience during the workshops.

**Results:**

1. Was the workshop time appropriate?
The International Scientific Conference of Librarians
Western Balkan Information and Media Literacy Conference 2020
& 9th International Summit of Book

The graph above shows the result of the question of satisfaction of faculty members and students of the Department of Islamic Studies Humanities and Social Sciences at Zayed University about the time of lectures or workshops. The time of workshops was distributed according to the requirements of the subjects taught and the professors or faculty, members prepared the tasks and duties of the students in the search for sources of information from books and electronic books related to the material of Islamic civilization and accordingly limited time was limited to do the workshops for twenty minutes to explain and clarify the research skills which suits students' needs. As for the professors, the lectures were designed for an hour to meet all their research questions in the library catalogs and electronic databases.

As indicated above, the percentage of satisfaction was very high (52.2%), and (28.3%). Therefore, we find that the general satisfaction with the time of the workshops was appropriate, exceeded the barrier (80%), which is the total percentage of respondents to the responses (I fully agree and agree). This result is highly satisfactory for the presentation time, and demonstrates the efficiency of the staff of the library staff, the reference technicians in the presentation of the workshops to the faculty members of the Department of Islamic World Studies, and the students enrolled in its academic courses alike in evaluating the time selected for the presentation of the workshops. The results of the questionnaire show that the percentage of responses in the other options (I do not agree and do not know) combined 19% of the overall percentage of respondents, where a small percentage of the beneficiaries' dissatisfaction with the time specified for workshops.

In conclusion, it is clear from the results of the ratios on the efficiency of lecturers in the presentation of workshops on information literacy / information literacy commitment to determine the time for workshops or lectures. The results showed that there is a high degree of satisfaction with the workshop time, Positive indication of the time of the workshops provided. Taking into account the review of the workshop time to obtain more satisfactory results on the appropriate time, which means upgrading to meet the requirements of the total of 20% of the attendance in the literacy programs information / awareness of information in the future

2. The overall level of the workshop

46 responses

In order to determine the general level of the workshop, the results of the questionnaire showed that in the random sample of students and faculty members, 60.9% of the sample indicated that the workshop was very excellent and 21.7% said it was very good. Suitable for the needs of students and faculty or not? And to enable them to search for information sources and discover databases that allow them to make the most of the tools of scientific research. The results of the survey showed that 15.2% were satisfied with the level of the workshop and were well evaluated
3. Was the information provided by the lecturer adequate?

The survey showed that (71.7%) fully agreed that the information was adequate and (21.7%) agreed with the information provided in the questionnaire. Workshop. This question has been asked to clarify the impact of the information presented in the workshop and the extent to which students and faculty benefit from this information while (4.3%) responded by don’t know and 2.2% did not agree with the information, which is very small compared to the overall percentage of respondents. Therefore, the percentage of general satisfaction was (93.4%) of the total percentage.

It is noticeable in the graph clearly shows the results of this question between the information provided by the lecturers was adequate during the lecture covered the needs of students and professors in the Department of Studies of the Islamic world and were satisfied by (93.4%) of the total percentage of respondents.

4. Do you have any comments or suggestions to add?

By taking an overview of the results in the chart above, we have moved the entire comments from the observations or suggestions made by the respondents as follows:
- We hope to increase these workshops.
- No.
- A trip to the library will be good.
- more clarification.
- Time need more adjustment.
- I thank Professor Shaima for her fruitful work.
- I wish you success in your life.
CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- It is clear the efficiency of the lecturers in presenting the workshops on information literacy / information literacy is clear. The results showed a high degree of satisfaction with the material provided. The percentage of (93%) is a positive indicator of the lecturers' knowledge of their information.
- We find that the results of the questionnaire were quite satisfactory for what was used and provided explanations during the workshops to attend. On the other hand, (100%) is an excellent tribute to the audience about the potential of the library staff (reference technicians) to provide and provide adequate technological aids. We also note from the results of the questionnaire that there are no answers to the other options (I do not know, not good) and this percentage is combined (0%) of the total percentage of respondents. The results showed no doubt about the availability of a high degree of satisfaction with the callouts used.
- The efficiency of lecturers in the presentation of workshops on information literacy / information literacy and their commitment to determine the time for workshops or lectures. The results showed that there is a high degree of satisfaction with the workshop time. The percentage of (80%) is a positive indicator of the workshop time. Taking into account the review of the workshop time to obtain more satisfactory results on the appropriate time, which means upgrading to meet the requirements of the total of 20% of the attendance in the literacy programs information / awareness of information in the coming times.
- The overall level of the workshop was satisfied with an estimated number of attendees and the needs of the students and professors in the Department of Islamic Studies, where the overall percentage of satisfaction with lectures was 97.2%.
- It is clear that the information provided by the lecturers was adequate during the lecture and covered the needs of students and professors in the Department of Studies of the Islamic world and were satisfied with (93.4%).
- Many of the attendees made observations and proposals such as: increasing the number of workshops, requesting a visit to the library, the need to clarify more, time needs more control, thanked Shimaa for her fruitful work, and wished success in her life.

Recommendations:

- Conducting lectures or workshops in a dialogue and interactive manner between reference technicians, faculty members and students, and work on building research background and knowledge of subjects of interest to their university research.
- Encourage the attendance of students and teachers to interact during the lectures and ask questions and how to search.
- Increasing the interest of library members in continuing communication with faculty members to activate the goal of spreading information awareness of students. Encouraging university faculty members and students alike to use available resources, both electronic and printed.
- Attend a number of courses, training and conferences that enable the library technicians to use the best techniques and to learn about the latest practices developed in international universities.
- Participation of research on information awareness with other universities at the local, regional and international levels through participation in scientific journals or conferences through worksheets or posters.
The need to integrate the teaching of information literacy skills with research methods so that practical and field teaching can be utilized.

The need to encourage faculty members to oblige students and students to conduct periodic research and use the resources of the printed and electronic university library.

Focus on issues of citation from sources and avoid plagiarism for students who need to cite reliable sources, and guide students to Arabic databases that support reference citation.

Conducting the largest number of workshops and lectures on information awareness to cover all the students of the university, including faculty members and to identify the services provided by the library from multiple sources of information.

Moving to the presentation of information awareness lectures for students of the Master's programs and cooperation with the College of Graduate Studies to provide workshops on information awareness in a specialized way to contribute to the legalization of their university research.

Defining the shortcomings of the next questionnaires by identifying the type of respondent (male / female) and the respondent's recipe (student / professor) so that we can obtain more accurate results on general satisfaction and develop this experience.

Advance planning with faculty members to provide more in-depth lectures on the search for sources and databases and the introduction of new datasets recently shared by the Library, allowing new members to keep abreast of everything new in libraries and learning resources.

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Supplements

**Letter to faculty members**

In collaboration with faculty members of the Institute of Islamic Studies, the library staff prepared a series of workshops to train users in the skills needed to find, retrieve and use information resources at libraries and learning resources at Zayed University to familiarize themselves with research skills in information resources that help them in academic research.

We in libraries and learning resources are preparing a research on the satisfaction of trainees from the workshops offered, and the benefit we can derive from your opinions and suggestions to develop this program and measure its ability to keep up with the knowledge development in the coming years.

Please take part in this survey which takes less than 2 minutes. This link will be valid for two weeks from today until October 29, 2017

https://docs.google.com/forms/d/e/1FAIpQLS ScheWZcscjzHR3ToQloSJc5CDGr4L_KLd?irT-CJpy5byZBvA/viewform

If you have any questions about this study please do not hesitate to contact the library staff:
Haneen Abu Eida, Shaima Saqr, Samer Babeker

Thank you for your valuable time,
Yours sincerely.

**Privacy of information**

Your responses will remain very confidential, and we will note that the person you surveyed will not be named. The data for this search will be saved as data only, and no one will be able to see your individual answers.

A questionnaire on the satisfaction of the trainees in the workshops

WBIMLC 2020
We thank you for your valuable time to fill out this questionnaire. We hope you will answer all the items.

1. Was the lecturer conversant with his information
   - Fully agree
   - I agree
   - I do not know
   - Disagree
   - I do not fully agree

2. How satisfied are you with the presentation of the callouts used in the workshop?
   - Very excellent
   - Very good
   - Good
   - I do not know
   - Not good

3. Was the workshop time appropriate?
   - Fully agree
   - I agree
   - I do not know
   - Disagree
   - I do not fully agree

4. Overall level of workshop?
   - Very excellent
   - Very good
   - Good
   - I do not know
   - Not good

5. Is the information provided by the lecturer adequate during the lecture?
   - Fully agree
   - I agree
   - I do not know
   - Disagree
   - I do not fully agree

6. Do you have any comments or suggestions you would like to add
   ..................................................................................................................................................
LIBRARY SERVICES DURING COVID-19: AN ATTEMPT TO BRIDGING THE LEARNING GAPS

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ABSTRACT
This research paper explores the level of engagement of library users during the complete lockdown in a country. This paper attempts to measure the willingness and awareness of users in relation to online services, their satisfaction level, barriers faced by them, gaps identified, and awareness of different remote access platforms being provided by the library of Ambedkar University, Delhi. This paper also reflects on how students manage digital resources and e-books. Special emphasis has been given on students who prefer learning materials in print format (along with their ownership of ICT tools). This is an unusual time as the world struggles to re-plan and re-strategize to encounter the challenges put forward by the Covid-19 Pandemic. Therefore, getting responses from users is the need of the hour and may become the basis of future interventions and adjustments in library services.

Keywords: Library services, Electronic Resource, Digital Divide, ICT tools, Remote Access, Online Learning, Covid-19, Pandemic.

Objectives: The objectives of this study are to know -
1. The ownership of ICT infrastructure
2. The user’s satisfaction and challenges using online library services remotely
3. Awareness of library services and competence of using them.

Method: A survey through email.
The survey consists of research questions covering the various initiatives and services provided to users during the lockdown period -
RQ-1 Do users possess their own personal computers or smartphones with internet connection or not?
RQ-2 Are the users aware of remote access platforms and, if yes, are these platforms being used by them?
RQ-3 How do users perceive library services during the pandemic?

Tools and Sample: A semi-structured questionnaire prepared on google forms, which was circulated to the library users’ group.
The questionnaire was circulated among 500 students consisting of Undergraduate, Postgraduate, MPhil and PhD scholars of the Ambedkar University Delhi, India. Only 106 users responded to the questionnaire.

Introduction: Covid-19 is a global emergency, which is first and foremost a medical crisis, impacting every aspect of socio-political-economic life of the people. In March 2020, a major proportion of countries in the world decided to opt for complete lockdown to stop the spread of the corona virus. Like other countries, India had also declared complete lockdown from 23rd March 2020 onwards.
All of a sudden, the closure of academic institutions and other learning spaces have obstructed 94 percent of the world’s student population, whereas up to 99 percent in developing and least developing countries. During April 2020, worldwide, an estimated 1.58 billion school children and higher education students in 200 countries were affected by the COVID-19 outbreaks (UN, 2020).
This is an emergency, superseding all other existing emergencies, and thus academic staff did not get adequate time to respond to the crisis immediately. This crisis produced a disruption not only
in student’s learning, but also interrupted their internal assessments\(^1\). The unexpected lockdown had brought several challenges before the students, parents, teaching community and the management.

Though some universities, colleges and schools were using online resources even prior to the Covid-19 crisis, the lockdown, forced higher education institutions and students to opt for digital resources and online platforms. Needless to say, that online platforms require a dedicated space at home, e-infrastructure, essential gadgets, quality internet service, electricity and data purchasing power. The new requirements at home, pushed a large number of students into a vulnerable situation. Such groups could not utilize the available resources and online services offered by the university (library) during the closure of the university.

In India, online education is a challenging situation, rather than an opportunity for progress. Broadly, half of the Indian population does not have access to the internet. Statista (2020) \(^2\) states that during 2020 the internet penetration rate in India is around 50 percent; which means that half of the Indian population out of a total of 1.37 billion people does not have internet access. Though these statistics present a grim situation, India has a high number of users and ranked second in the world with active internet users. The data of online learning reveals that only 24 percent of the households of students have internet access, and in which, 42 percent internet availability is in urban areas and only 15 percent families of rural India\(^3\) have access to the internet.

**Literature Review**

**Online Learning: Opportunity or Challenge?**

The International Association of Universities (IAU) conducted a survey globally and got the response that 91 percent of higher education institutions (HEIs) in various continents like Europe (97%), the Americas (97%), and Asia & Pacific (99%), has the infrastructure to communicate with students and staff about COVID-19, except African countries where 66% universities have infrastructure to communicate while 34 percent African universities do not have even a basic infrastructure (IAU, 2020). In the same survey, 67 percent universities said that classroom teaching has been replaced by distance teaching and learning. In addition to this, as much as 80% of HEIs who have responded to the survey reported that research at their institutions has been affected by the COVID-19 pandemic (IAU, 2020).

According to the Lancet Editorial, “The troubling effects of the pandemic on research and higher education are coming into sharp focus. Immediate challenges such as campus safety, university admissions processes, and online learning arrangements are dominating the discussion.” (The Lancet, 2020).

Wargadinata et al., (2020), argues that web-based learning can’t just occur under the circumstance of the COVID-19 pandemic, yet it is another option and an imaginative learning model that must be solid and steady from the framework with specialized and material angles. The accessibility of different parts of web-based learning will have the option to show huge learning results. Web based learning will likewise have the option to understand a learning approach dependent on self-managed learning, as the occasions request that each understudy have the option to be autonomous and enhance in the learning cycle.

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United Nations, (2020) COVID-19 guidelines emphasized that in the higher education sector, “Online learning has generally taken place through recorded lectures and online platforms, some universities have postponed learning and teaching until further notice, due to the lack of information technology (IT) infrastructure”.

Ibrahim and Febriani, (2018), also explained that in online learning, students of higher education have an inclination to access learning material in the form of lecture slides, video lectures, pdf, e-books, e-journals, ETD etc. However, the level of need for internet use inspires the development of learning materials that are developed based on subjects and leads to the creation of the final product in the form of e-material. The research shows that there are four key reflections in designing online learning:

i) learning structure
ii) content presentation
iii) collaboration and interaction and
iv) timely feedback (Wargadinata et al. 2020).

Verawardina, Unung; Asnur, Lise et al,(2020), says that, in online learning there is no geographical constrains it can happen anywhere, only we need to develop digital infrastructure. They regarded online learning as an emergence of the covid-19 outbreak that threw the world away.

However Schneider and Council (2020), has said that, online learning is not a new concept; however, for many of us as physicians, particularly academic physicians it is a shift away from our traditional classroom teaching model for trainees.

**Library Services and COVID-19**

The requirement for information exists in each emergency; library and library professionals must be prepared to address this issue whether it is for COVID-19 or something different. During a pandemic, the library should likewise proceed with help to its regular users. (Ali and Gatiti,2020). To break the chain of COVID-19 pandemic, almost all the colleges and universities around the world have been approached to close down and make an instant transition of face-to-face education to online learning within few weeks of time. This has created a challenge not only for libraries but also for students and teachers together, over and above the services that the libraries have been providing prior to pandemic.

Kuwait University Library conducted a survey on its use of electronic resources (ER) by the faculty of Kuwait University across the 12 colleges during the pandemic. The result shows that 60 percent of respondents were non-users of electronic resources, when physical access to the library was closed. The reasons behind not using the ER was unawareness of electronic resources, unawareness of how to use them and lack of needed resources (Hendal 2020).

Ali and Gatiti,(2020), advocated that during any pandemic, there are three dimensions to a librarian’s role: First, “To promote public health awareness by creating and disseminating information relating to preventive measures; second, to support research teams, researchers and faculty by providing information regarding the latest developments, research and literature; And third, to meet the core needs of regular library users”.

Mehta and Wang, (2020), found that the global pandemic has impacted digital library services, users and library professionals who provide these services in many ways. The library has been operating its services in a unique model that it has never practiced before.

**Ambedkar University Delhi (AUD) Library:** In Indian universities, this quarter from March to May, were scheduled for the end of the semester and examinations. During this quarter, the library observed comparatively a massive footfall as compared to other months of the year as students visit the library to prepare for the final examination. Demand for digital resources and computer aided materials also sees an increase call in the campus.
AUD library has been extensively conducting user’s awareness/orientation programs to empower the library users and maximise the usage of subscribed electronic resources. AUD is spending a huge amount of budget on electronic resources including 44 online journals database and 17 e-books and archival database to promote research and academic excellence in the field of social sciences and humanities.

Like other university libraries, Ambedkar University Delhi, (AUD) library users were forced to opt digital services, at the point when physical resources become inaccessible or the accessibility is restricted. The requirement for getting to and utilizing e-resources may get higher, but the concern was that not all students have familiarity or awareness of using AUD library’s various search platforms to find the resources as per their requirements. Before closure of the university, most students used to access online resource in-campus. But accessing e-resources off-campus can only increase the chaos because this requires awareness of remote access platforms and required skills and infrastructure to using them. There is a tendency that electronic resources were being used mostly by Postgraduate, MPhil and PhD students. This pandemic has created an opportunity to endorse e-resources to students, especially undergraduate students that have a habit of using Google search engine to fulfil all academic requirements related to their course.

AUD library prepared some tutorial videos through screen recorders to help those users who were unaware or never used remote access platform like Sophos Connect and INFED. These tutorials also covered searching techniques and installation of software. The Library also provided usernames and passwords for direct access to individual database. By all these initiatives it was vital to know the user’s response on the services being provided by the library during COVID-19 pandemic.

Results and Discussion

Respondent’s Profile

The survey questionnaire sent through email to the official email group ID of more than 2500 students of 13 schools and nine centers. A total of 106 responses was received in google forms. The respondents were from Undergraduate, Postgraduate, MPhil and PhD level as shown in (Table: 1). The maximum number of responses were received from MA (47.2%) students and then BA (26.4%) students; least responses were from MPhil (4.7%) and then research scholars (21.7%). The reason behind this may be that MPhil and PhD courses have a smaller number of students enrolled in comparison to the other two programs.

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4 https://aud.ac.in/services-1/library/e-resources
5 https://aud.ac.in/online-database
6 https://aud.ac.in/e-books-and-archival-database
7 https://aud.ac.in/schools
8 https://aud.ac.in/centres
Ownership of ICT Infrastructure
Access to ICT infrastructure like devices with internet connection is a very essential part of online learning. In response to ownership of information communication technology (ICT) tools, (Table: 2) 86.8 percent students have their own laptop, desktop or tablet.

Whereas 13.2 percent students still do not have any gadgets other than smartphones; 99.1 percent respondents said they have their own smartphone (Table: 3). Maximum number of students (96.2 percent) have internet connection at their home (Table: 4). It must be very difficult for those students who do not have internet access at home to attend online classes and access library resources. Though their number is the least, they are deprived of online learning and this is creating learning gaps between them and other students.

Library Services
The AUD library provides all the information related to new arrivals, SDS, current awareness services, activation of new resources and their access through email. A majority of students- 87.6 percent- said that they read library emails regularly.
However, 12.4 percent students never read library emails which indicates they are not aware of the different services being provided by the library to users (Table: 6). Prior to the lockdown, library users had the opportunity to physically access library resources and online resources both, but the lockdown forced users to access only the online platform. This compulsion to use the online platform created loads of challenges for students because it is linked with several other issues like such as the required infrastructure, skills and awareness to use online resources. In AUD, 67.9 percent library users are accessing online resources remotely through remote access facility (Table: 7) of the library, but a good number of students (32.1%) are still not using remote access platform to use library resources. 38.9 percent of them said they have difficulties in accessing resources online (Table: 8).
AUD library is providing two main platforms for remote access, INFED and Sophos Connect to connect library pages and resources remotely or off campus. Library has also offered username and passwords for some specific individual publisher’s databases for certain period of time. Some students are using only INFED (15.1%), some Sophos connect (19.8%) and comparatively higher number of students prefer username and passwords however some are using all the platforms (18.9%) and some are not using (21.7%) any of them (Table:9).

Though 60.4 percent students know about the INFED facility of the university, only 34 percent of them using this platform to access online resources off campus. To know how they came to know about this facility, 89 percent (Table: 10) students said that they were made aware of this service either by library emails, library orientations or video tutorials shared by the library during lockdown. Very few students (7) knew this facility through either their friends (4) or teachers (3) (Table: 10).
A similar response was received on the question of Sophos Connect and how they came to know about this platform (Table: 11). The Library prepared two video tutorials on how to use online resources from remote access because access to all these resources is IP based. Videos were shared with library users and it was found that 50 percent (Table: 12) users watched the videos, 76 per cent of them found them useful (Table: 13) and 24 percent did not find them useful to access remote facility.

The Library team has been working diligently to serve the users. 70.6 percent users said that the library team resolved their access related issues immediately. However, 29.4 percent denied the claim (Table: 14). On the other hand, 80.4 percent users responded that the library team was accessible all the time during the lockdown (Table: 15), which means they can contact them any time for their issues related to access of resources.

### Know VPN?

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Table: 11 Remote Access
It is worth noting that 76.4 percent users seem satisfied with the services provided by the library during the lockdown at AUD. However, more than 23 percent users registered their dissatisfaction (Table: 16). Almost all the users (96.2%) rated the library’s tasks as ‘good’ during the lockdown in the country. The users have rated the library on the following scales- Good (39.6%), Very good (17.9%), Excellent (25.5%), Outstanding (13.2%) and Poor (3.8%) (Table: 17). Nevertheless, this pandemic has forced online teaching-learning, but 43.3 percent students still don’t prefer an online mode of the library. However, 56.7 percent users, said their preferred mode for library will be online (Table: 18). Though 56.7 per cent users said they wish to access online services of the library, in contrast, 74.5 percent users aspire to have offline mode of classroom interactions in the upcoming semesters. 25.5 percent users place their safety first and want to interact in a class like situation through the use of online modes. (Table: 19)
Ambedkar University Delhi Library worked hard to satisfy its users and the user’s responses are quite satisfying for the library team also. The Ambedkar University Delhi should work closely with the 25 percent users those are not pleased with the services offered by the library. As students indicated the possible reasons were lack of infrastructure or bandwidth or speed of internet, because 40.4 per cent users use mobile with internet connection (Table: 5). In some cases, a lack of awareness and skills to use different platforms are the major reasons for the inaccessibility of different remote access platforms. Teachers must come forward and work
collectively with librarians, as the results show that the least number of students came to know about the various platforms of the university through their teachers. AUD library should inquire why only 60% users are accessing online resources during this time of restricted mobility, when more than 90 per cent students admit to the ownership of ICT tools. The Library should make plans to reach out to its users to resolve the issue of online access. In some cases, limited usage might be related to skill gap or lack of awareness. Additionally, the library should conduct hands on practice workshops for users to reduce learning gaps among the students.

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GENERATION Z SELF-ASSESSMENTS AND PERCEPTIONS OF INFORMATION LITERACY SESSIONS IN THE BUSINESS SCHOOL

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ABSTRACT
This session will feature a grant-funded research project wherein the presenter collaborated with business faculty, created lesson plans to maximize instruction, and administered two sets of surveys to assess current undergraduate perceptions and self-assessments of library instruction. The results of the study served as the basis for greater collaboration between professors in the business school and library. Moreover, the study illuminated student perceptions of the most effective portions of library instruction as well as what portions need to be enhanced in order to develop a stronger information literacy component and prepare students for rewarding academic experiences as well careers in the business field. This online session will offer tips and practical experience in employing information literacy sessions. Participants will review the research guide created for the business students as well as the data collected on the guide’s usage and students’ perception of the guide. The data addressed what students expect in business information literacy sessions and findings on students’ level of confidence—or overconfidence—regarding information literacy concepts. This interactive conference session will help participants improve their library instruction.

Keywords: Information literacy; Business pedagogy; Undergraduate perceptions; Library instruction; Information literacy skills

INTRODUCTION
Finding and evaluating accurate and reliable information is a foundational principle for liberal learning. In the arc of learning, this foundational skill is put to the test in order to help students succeed in the academic environment and the world beyond college. Stetson University addresses information literacy skills as “essential learning outcomes” for the undergraduate general education curriculum (Stetson University, 2011). Stetson University is an independent, liberal arts college in DeLand, Florida, with 3,100 undergraduate students (Stetson, 2019).

The Project Information Literacy (PIL) surveyed more than 11,000 college students to examine how they access, evaluate, and use information sources. Several key conclusions informed the conversation, including that “finding relevant and accurate answers is one of the most difficult and frustrating challenges college students face today” (Head, 2013, p. 476). In fact, half the students interviewed in PIL expressed “nagging uncertainties with concluding and assessing the quality of their research efforts” (p. 475).

Librarians at Stetson University’s duPont-Ball library seek to quell these uncertainties in visits to various classes throughout the academic year. The goal is to improve students’ levels of confidence and information literacy (IL) skill set. Stetson University is an independent, liberal arts college in DeLand, Florida, with 3,100 undergraduate students (Stetson, 2019). It has four colleges and schools located across Central Florida. The University’s General Education Committee adopted the Information Literacy Rubric in 2019, which outlines a scale of mastery regarding IL milestones (Stetson, 2019). The skills range from unacceptable to exemplary.

The academic literature has focused on faculty and librarian observations and attitudes toward business information skills. While important to the conversation, involving the students in the learning process will strengthen the sessions.

In this study conducted with anonymous surveys, students had an opportunity to offer candid feedback on where they were in the arc of IL skill development. With a strong survey sample, the study illuminated unforeseen gaps in the library instruction as well as perceptions of students’ strengths and weaknesses when evaluating and accessing information sources.
Librarians visiting classes typically have one 50- or 75-minute class session to teach the information literacy component. Obviously, students need more than one session to learn all of the concepts involved in becoming information literate. The Association of College and Research Libraries’ Framework for Information Literacy for Higher Education contains six condensed concepts, including the following: Authority is Constructed and Contextual, Information Creation as a Process, Information Has Value, Research as Inquiry, Scholarship as Conversation, and Searching as Strategic Exploration (ACRL 2015).

Therefore, librarians must choose which concepts to address in such a brief time. Responses from student surveys can help librarians design instruction sessions that meet their most pressing information literacy needs. Furthermore, the component of lifelong learning cannot be understated regarding business students. At Stetson, one of the School of Business Administration (2019) values is to “promote and support life-long learning” (para. 5). The need to analyze large datasets, find and keep clients, and examine business trends will be a perennial issue with entrepreneurs and business employees, creating the need for lifelong learning as well as lifelong research competencies. Library instructors are uniquely suited to encourage business student research competencies.

The Association of American Colleges and Universities conducted a survey in 2013 which affirmed employers supported “education practices that enable students to conduct research and carry out evidence-based analysis” (Malafi, Liu, & Goldstein, 2017, p. 82) The following study sought to assess undergraduates’ attitudes on the research and analysis required in their business course.

**GOAL, PURPOSE, AND OBJECTIVES**

The School of Business Administration’s foundations course, SOBA 205, expects students to “evaluate research sources” during its writing-enhanced coursework (Stetson, 2019a). In writing-enhanced classes, information literacy (IL) is an essential outcome. SOBA 205 classes serve as pre-requisites for business majors, though students from any academic year may take them as well as students outside the SOBA major.

Librarians have published research on business student attitudes toward library instruction, but none since the ACRL’s adoption of the Framework in 2016. The Framework encourages librarians to “connect information literacy with student success initiatives” as well as “collaborate on pedagogical research and involve students themselves in that research” (ACRL, 2015, pg. 6). This project included a survey of SOBA 205 students after the librarian instruction session—before their midterm assignment— to measure their perceptions of the information literacy component. After students submitted their midterm assignments, they responded to another survey to determine what sources of information they accessed in order to complete their research and if their perceptions changed after having submitted their work.

Aiding the development of scholar from novice learner to business professional requires substantial academic partnerships. Several SOBA faculty members agreed to allow their students to participate in this research project. This study asked several questions regarding information literacy for business students. Chiefly, do current students feel the instruction practices at Stetson meet their information needs? Do students find the course-specific research guide an effective learning tool? What do students report as the most important aspects of IL in meeting their research needs? The surveys have illuminated how business students perceive the specific concepts taught during the library information sessions. The study investigates students’ level of confidence regarding their research abilities and how they feel about improving their information literacy skills.

Additionally, what are the immediate perceptions of business students about IL instruction compared to student perceptions after having completed an actual task requiring IL skills? Library instructors can learn from the time frame in which the study was administered, during which students digested and applied the skills in a concrete assignment over a period of time.
LITERATURE REVIEW
The academic literature includes much research on business faculty perspectives for information literacy. As Wu and Kendall (2006) wrote, “The integration of information literacy skills into the business curriculum is a growing concern in colleges of business and in the academic libraries that serve them” (p. 87). Additionally, one study assessed how often librarians taught business students and found, “When business information literacy instruction is provided to students, it is most often provided in on-demand instruction presentations to business classes” (Cooney, 2005, p.17-18). Because “academic libraries have long held formal and informal instruction to the profound benefit of...business students.” (Senior, Wu, Martin & Mellinger, 2009), examining these classes could improve the experience for students (p.203). Although library researchers have studied business student perceptions and self-assessments in the past (Conley & Gil, 2011; Gewirtz, 2014; Judd, Tims, Farrow, & Periatt, 2004; O'Neill, 2015; Strittmatter, 2011), there has been scant literature in the way of student perceptions and self-assessments since the ACRL’s 2016 adoption of the Framework for Information Literacy for Higher Education. It is important because “the business community recognizes the value of an information literate workforce: employees who can effectively and efficiently use technology to locate, manage, and communicate business information” (Katz, Haras & Blaszczynski, 2010, p.135). In fact, O'Sullivan (2002) contends business employees “are floundering with too much information readily available, too little relevant and timely information when they need it, and with few tools or skills to deal with information effectively” (p. 9). Numerous recent graduates interviewed in Project Information Literacy groups “reported they leveraged competencies from college for evaluating and managing published content once they graduated and entered the workplace and were conducting workplace research” (Head, 2013, p. 476).

However, business students are known in the literature to chew the ACRL’s threshold concepts, what with the “general lack of information literacy skills students possess,” and an “overwhelming reliance...on nonauthoritative information sources, such as Google and Wikipedia” (Detlor, Julien, Willson, Serenko, & Lavallee, 2011, p. 573). The need to connect with students and engage with them is an important challenge. The Framework’s concepts are not new and neither is the need to improve research skills. In order to introduce students to the Framework, the language must contain less library jargon. Instead of calling them information literacy skills in this study, it was important to call them “research skills.” As Cunningham and Anderson (2005) defined it, “the term ‘research’ meant “having to find information, in any format, for a business class topic” (p.11). The following study explores what Leigh and Gibbon (2008) called the “unrealistic perceptions of their abilities to conduct research” and how or if these perceptions changed over the course of completing a major assignment on the heels of library instruction (p. 513). In fact, overconfidence is an area measured in this study because students usually “believe that they have above-average IL skills, when, in fact, an objective test of their ability indicates that they are below proficient in terms of their actual skills” (Gross & Latham, 2012, p. 574). The need to analyze current student perceptions of information literacy is clear. As researchers in a 2003 study found, business students who perceived the Internet as a “convenient, easy-to-use, comprehensive research tool were not so ingrained and inflexible as to blind them to the benefits of using other resource types to complete their research projects” (Lombardo & Meree, p. 19). Discovering what types of resources business students use will offer practical directions for future instruction sessions.

METHODS
In the spring semester of 2020, I visited eight separate classes taught by three separate professors. The previous semester, I had taught four of the classes for one of the professors. Having developed a rapport with her made it possible to conduct the surveys. She also helped introduce me to two new professors teaching SOBA 205.

WBIMLC 2020
For the class, I had prepared a session guide with business resources prior to their midterms. The guide contained resources to help students complete their research projects. Each class professor had sent their syllabi and assignment details. Although similar classes, one of the professors’ focus for the midterm included a career assessment component, which required a slight adjustment in the session content. However, judging from a careful review of the syllabi, all classes would complete a thorough research-based assignment and therefore I included appropriate resources in the course guide. I prepared the session as an “an overview of the research resources available to them at the university library and with hands-on experience with the use of these resources,” (Roldan & Wu, 2004, p. 325).

The guide featured tabs and subsets of information for the students, including an introduction to the guide, a reason for the guide, and how employers esteem information literacy skills. I provided a video on how much more effective the databases were for conducting college-level research compared to sources online. All the professors emphasized in their syllabi that students could not use the easy internet searches – and particularly Google- but rather they had to utilize library databases and the discovery tool (OneSearch). The survey in this study asked students to anonymously disclose their use of Google versus the library resources.

The guide included several other sections based on the professors’ syllabi which would help the students complete their coursework for the semester. The guide incorporated search tips tailored for the course such as choosing keywords, narrowing a topic, cutting search terms, as well as using filters and limiters (i.e. source type, format, date of publications, subject etc.). The guide and session introduced truncation and choice of database. The guide addressed peer-review, an overview of career resources, company and industry information, finding and creating citations, as well as streaming videos on business topics. To reinforce the need for library instruction, I included the course learning outcomes in the guide because they align with library instruction goals, particularly the following: “after completing this course, students should be able to... evaluate research sources... and use supporting technology to improve writing mechanics” (Stetson University, 2019a, para. 2).

As we navigated the tabs, I demonstrated how to use certain databases and also why each should be used. The first example was the discovery tool-OneSearch- what we used to call the catalog. As many of the students had already completed an introduction to library resources- including OneSearch- I did not spend much time on but briefly reviewed how to use it and how to limit and change searches using keyword creation, truncation, search limiters, among other tools. I showed students how to access specialized business databases not indexed by our discovery tool.

We spent a good deal of time searching for statistical sources. I introduced them to the database Statista and helped them experiment with their searches, using various business-related keywords. Likewise, as the professors urged them to not use Wikipedia, I introduced them to searching for background information on their research topic, including an introduction to the database Credo and the specific features it contains, as well as keyword creation and search strategy. We used ProQuest Complete to find and explore a variety of formats including eBooks, newspapers, trade journals, and peer-reviewed articles. Here, we once again applied appropriate filters, adjusting the results by year and adjusting to include full text sources. Here we also filtered the results to peer-review sources and discussed the differences between scholarly sources versus everything else. Many of the students did not know the concept of peer-review. I introduced them to the idea and what it meant for their academic careers, tools to recognize the sources, and the research process involved in peer review.

We addressed the idea of creating a search strategy using concepts they had already covered in their textbooks. It was a rudimentary lesson, starting with the word “interview” and discussing what students might mean by the word. Students considered a search strategy and came up with the idea of “interview process,” “interview skills,” and “interview questions.”
We finished the exploration of the databases with a demonstration of the ones designed to help students in their career path. We reviewed a database called “Career Transitions” as well as those related to industry research such as Mergent, Occupational Outlook, Gale Business, Nexis Uni, and the ProQuest and EBSCO business databases.

The class was ostensibly formed as a second-year course, but the class composition was much more varied. It consisted of 91 first-year students (freshman), 13 sophomores, 9 juniors, and 6 seniors.

I asked students to relay their majors, or planned course of study. I provided the some of the more common majors at Stetson and also a space for them to write their choice. The bulk of the students planned to study traditional business careers, as might be expected. Business/Management (and Entrepreneurship) had the most students with over one-third (45 totals), followed closely by Finance and Accounting (31), and Marketing (15). A few students chose Healthcare (9), STEM-related studies or information technology (5), and Political Science/Law (4). Ten students were undecided.

After library instruction and before the midterm, students completed surveys. In this first survey, 119 out of 131 students submitted the survey, a 90.8% response rate. I announced I would return after the midterm. Therefore, after they had submitted their midterm, I offered a gift card in each class as an incentive for students to complete the survey, which improved the number of survey results and response rate. After showing me the submission confirmation screen, I wrote their names on a piece of paper, placed them into a hat, and the professor chose the name. 122 students out of 128 submitted surveys (a 95.3% response rate). The two sets of surveys were administered approximately three weeks apart.

RESULTS

The results suggested answered to many of the study’s questions. As has been the case in most library instruction, the students highly favored instruction in both before and after surveys. In response to the question, “This session helped me improve my library skills,” most students answered in the affirmative. The graph in Figure 1 shows a slight decrease from the in the strongly agree category, with only 70 respondents feeling strongly after the midterm submission, compared to the 77 after the library instruction, an almost 6.5% decrease. However, this those who agreed increased 2.5%. Those who reported a neutral increased by 5% and those who both disagreed and disagreed strongly remained the same.

![Figure 1. Session improved library skills (both surveys).](image-url)
In the category of confidence in their ability to evaluate sources of information, the results changed only slightly. The after-instruction results demonstrate that most students felt confident in their ability: The results after midterm submission varied only slightly. Although confidence levels are generally high, the change over time in this study, coupled with the data collected from the other survey questions, reveal that students remain eager to build on their ability to evaluate sources.

After completing their assignments, only two students remained slightly confident, down from the original five. Perhaps upon completing their assignment, the students realized they had more ability than first thought. Similarly, the combined percentage of those who felt extremely and quite confident improved over the period.

Figure 2. Comparing confidence levels in the sessions.

Figure 2 shows the percentages of confidence in a bar chart. After library instruction, the percentage was 79.83% but after the midterm, the percentage improved to 85.25%, almost a 5.5% increase, a measurable gain which supports the need for library instruction in general as well as specific instruction tied to assignments.

One of the more interesting set of responses I found concerned student perceptions of the importance of research skills for SOBA 205 for their careers and lives after college. The survey answers were Likert-based, and the responses did not match my expectations. My hope was students would see the value of research skills for the careers because the SOBA 205 course was steeped in research needs and learning outcomes, emphasized by the professors in their syllabi, lectures, and assignments. As an extension, I had hoped they could see the importance of research skills for their life after college. The students valued research skills, but what I had hoped was after submitting their midterms, they would rate skills as even more important than they already had. They did not. Figure 3 shows how students rated research skills after instruction in the first survey.

After the submission, the second survey revealed a decline in positive responses. However, when combining the top three categories of importance- extremely, quite, and somewhat- the decline was just above 3%. In both surveys, students valued research skills. The chart in Figure 3 compares student perceptions of the importance of research skills.
The top positive rate decreased by 5%, with 87.39% rating them extremely and quite important before the midterm and 82.79% afterwards. Also, six students rated research skills as slightly important after the midterm, compared to one student before the midterm.

Similarly, students appraised the usefulness of the library session for their assignment. During the class, I helped the students find sources and they were given a brief period of time for an active learning exercise, where they searched for sources relating to their paper. Perhaps the extra time affected the responses rate or their perception of the session’s usefulness.

The data reflects a significant shift in perception from the time following the library instruction to the midterm submission. In the first sessions, students were predicting how useful the session would be to completing their assignment and in the second survey, they were reporting their experience. The number of students who chose “extremely useful” decreased from 58 to 35. Those who found the session quite useful improved and those who found it somewhat useful rose dramatically, from 4 to 24 students. The timing of the surveys may have affected the results. The surveys occurred in the middle of the semester. The final research project was not yet submitted, but the middle project required at least 3-5 sources from library databases and/or book collection. The shifts in attitudes were significant. A future study should include follow-up questions to accompany this question, in order to examine what factors, if any, contributed to the change in perception.

However, the students responded positively when asked if the library instruction session had made their research efforts easier. As part of the second survey, the goal of this question was to understand their assessment of the library session’s effect on meeting their research needs. Fifty students strongly agreed the class library session made their research efforts easier, and 51 agreed with the statement. This affirmative response rate equaled nearly 83%. A few students strongly disagreed (8) and one disagreed. Twelve students were neutral. The overwhelmingly positive response was an encouraging sign of the session’s effectiveness.
One of the aspects of the study to which I looked forward to analyzing was how students would rank certain information literacy skills based on the Framework for Information Literacy. In my study, I asked students to rank the skills from one to four, one being the most important:

- Ability to evaluate articles and journals/magazines for credibility
- Ability to Search for books and eBooks
- Citing sources in a paper
- Research strategies (techniques)

These skills are based on several pillars in the Framework, including Authority Is Constructed and Contextual, Information Has Value, Research as Inquiry, Scholarship as Conversation, and Searching as Strategic Exploration (ACRL, 2015).

After the instruction, students ranked these skills from 1-4. Of those they ranked first, the skill with the highest number was “research strategies and techniques,” with nearly half the students agreeing, eclipsing the others by more than 15%. Citing sources finished second, followed by the ability to evaluate sources for credibility, and then search for books and eBooks.

When asking the same question after the midterm submission, the results changed significantly. While remaining in the number one spot for importance, research strategies fell 12% and the other skills moved up significantly, creating a much more even distribution among students. Less than 6% separates the top skills from bottom. Citing sources remained almost identical in both surveys. The ability to search for books moved up to the 3rd spot after the midterm, followed closely by the ability to evaluate articles for credibility. From the time of instruction to submission, the students’ perceptions of these skills shifted. The results of the second survey are encouraging because they suggest students value all information literacy skills taught in library instruction. The chart in Figure 4 demonstrates the data.

All the professors in this study asked their students to eschew Google or Wikipedia and to instead make use of the library databases for their midterm projects. Professors required 3-5 sources from the databases, which could include articles (both peer-reviewed and otherwise), as well as books, and even select media depending on the appropriateness regarding the project. However, students did in fact use Google, as the results illustrate. 49.1% of students used Google with library
sources, 42.6% of students did not use Google at all, and 8.2% of students used Google exclusively for their project.

Reviewing the data further, the students using Google differed widely on which additional sources of information they used to complete their midterm. Those students who searched Google used research guides and databases the most, which was heartening, given the amount of time spent during library session on the guides and databases. In fact, of the number of students who used Google, 51 out of 60 (85%) made use of the databases and guides. The fact that they would use the primary tools the library offers to complete their research underscores the importance of the library session’s focus on these tools. The other resources students employed almost evenly among a combination of books, journals/ magazines, and databases. Only a few students used only Google and Library journals/ magazines. Among the students who did not use Google at all, the distribution of resources was much less even. The chart in Figure 5 outlines the various usage.

![Figure 5. Sources students used instead of Google.](image)

The combination of resources accessed and employed on the midterm included a wide variety. During instruction, I emphasized the idea of distinguishing between and employing a variety of different sources in order for students to select appropriate information for their research needs. The charts and tables indicate students practiced several of the frames, including “Authority Is Constructed and Contextual,” “Research as Inquiry,” and “Searching as Strategic Exploration” (ACRL, 2016).

It was essential to gauge student perceptions of the course research guide’s effectiveness and in completing their midterm. The majority of students, 94 out of 122, or 77%, reported they accessed the research guide created for the class. Less than a quarter of respondents used it infrequently or not at all. In fact, one student commented in the survey, “I liked the library session. I discovered the research guides last year, but I never actually utilized it until now.”

At the end of the surveys, the students answered questions regarding what concepts or skills they would like to know more of (or have more understanding). They were given the option for many foundational skills with the questions

At the end of the surveys, students answered the question “What areas regarding the research process would you like to know more about?” The options included Research strategies (techniques); Using specific library databases; Ability to search for print books and eBooks; Ability to find appropriate articles and journals; Citing sources in a paper. They had the option to choose one or all that applied. Out of all the various skills and combinations therein, the majority (65 students, 53%) included “research strategies and techniques.” Almost half the student (59 of them, for a percentage of 48%) chose citing sources in a paper as something about which to know more. 42 (or 34%) of students chose the ability to find appropriate articles and journals as something to explore more.
The pie chart in Figure 6 outlines the number of students who chose particular skills. The relevance of the Framework of Information Literacy is clear. Students desire a deeper understanding of the information literacy ecosystem.

RESEARCH GUIDE USAGE
Although the study only sought to evaluate and measure student perceptions and self-assessments, due to the results which the students reported— including a significant reliance on the course guide — it seemed prudent to review the statistics of the course research guide for SOBA 205. In part, I wanted to compare what students said versus the reality of their use of the guide, but also, after the COVID-19 crisis forced the university and library into a remote environment, I wanted to see if students used the guide after the midterm and for the remainder of the class. Students accessed the guide often in January and February, the months in which I taught the session, and they completed their midterm projects. Students exceeded my expectations in their use of the guide, what with 970 views in the month of February. I did not expect the 130 students I taught to access the guide several times, as the statistics suggest. However, in April when their final projects were due, they also utilized the guide, an encouraging statistic given the circumstances. Consequently, the course guide statistics serve as evidence to support their survey responses regarding which sources they used in their research, including the frequency with which they used the guide.

CONCLUSION
The experiment illuminated issues not yet considered. As is the usual case, the majority of students appreciate library instruction, which we know from the surveys and the vast examples in the literature. What was interesting was how their assessment of library instruction changed over a 3-4-week period. Students were confident in their abilities to research, but their research ability was less convincing, according to one of the professors whose class I studied, who remarked that students “desperately need library resources and a deeper understanding of information literacy.” Their immediate IL perceptions changed after having completed an actual task requiring IL skills. Their confidence decreased, as well as their assessments of the importance of research skills to the class. Regardless of their high confidence, the study emphasized how receptive students were to learning more about Framework concepts. The study did not track individual attitude changes over time (from instruction to post-assignment) but rather the group’s. However, the hope of the study was to analyze anonymously
the group’s attitude. Their own self-assessments of their ability shed light on their strengths and weaknesses regarding concepts in the Framework of Information Literacy. Library instruction going forward should be adjusted based on what the students wanted to know more about as well as their perceptions of their own ability.

Likewise, the study will lead to better collaboration on campus. For instance, because citing sources for a paper was such a desired need for the students, and the Writing Center on campus helps students with citation styles, it will be important to collaborate with the Center in order to meet these needs. The Framework certainly includes citing sources within the idea of “Information Has Value” and “Scholarship as Conversation,” but a thorough exploration of style guides is generally not feasible within a one-shot instruction session. Instead, library instructors must include thorough information and resources on style guides, such as additional content in the course guides, in order for students to utilize on their own.

The process of encouraging business students to consider the Framework has brought about changes to my own instruction. I plan to focus on the students’ requests to know more about research strategies and employing a variety of sources. Regrettably, most students only have an hour of time for librarians to teach the Framework. Studying their perceptions and use of the resources and concepts has provided directional cues to meet their needs. One result of the study has been to increase the time students have to learn information literacy principles. A flipped classroom approach would work well with students interested in strengthening their research strategies and techniques. The results of the study will enhance the development of the IL component, seek to improve the sessions with a focus on areas students want to explore, and further the dialogue between faculty and librarians to prepare students for rewarding careers in the business field.

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HARRIS KEMPNER CORRESPONDENCE LEDGER: DIGITAL PRESERVATION THROUGH THE PORTAL TO TEXAS HISTORY

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ABSTRACT
The Portal to Texas History, a digital repository for cultural heritage and historic materials from across the state of Texas, has provided a means of digitization and access, and by extension preservation, to books and other materials in support of over 435 contributing partners. Amongst these digitized materials are text, letters, books, book chapters, and thesis and dissertations. This case study will examine the process behind building preservation for and access to one book in particular; a correspondence ledger from the 1880s. The correspondence ledger is unique in the level of historic detail it provides both into business dealings in 1880s Texas and in familial matters. Comprised entirely of rice paper, the fragile ledger boasts transcripts of business letters written in English from Harris Kempner, a prominent businessman in Galveston, Texas, in the front and letters of a personal nature in the back, written in phonetic Yiddish.

Key words: Historical Materials, Digital stewardship, Digital curation, Digital preservation, Dark archives, Digital libraries

1. INTRODUCTION
Though the name and shape of Texas is commonly known, a richer context on the state is important. Texas is geographically, ethnically, and culturally diverse. Geographically speaking, Texas is the second largest state at 695,662 square kilometers (Reddick, n.d.). It is also the second most populous state in the United States of America with a population of nearly 29 Million individuals (Reddick, n.d.). With a wide variety of ethnic and cultural backgrounds represented in this space, a rich understanding of these various components is required.

The Portal to Texas History (https://texashistory.unt.edu/; the Portal) is a digital repository for cultural heritage and historic materials from across the state of Texas. The Portal began in 2002 with the desire to preserve the historic record of small communities at risk of either being absorbed by larger nearby communities or being abandoned for these communities. By 2004, thanks in large part to a Telecommunications Infrastructure Fund grant from the State of Texas, the Portal had an online presence with five collaborative partners and over 6,500 digital images. Today, the Portal boasts 436 partners and almost 1.8 million digital items. With their narrow scoped historical perspectives, the items made available on the Portal build upon themselves and other records to provide a more holistic understanding of events and players affecting the larger more known histories and potentially shifting understanding of the events. This is achieved by providing researchers with 36 distinct resource types that include newspapers, photographs, maps, books, and more.

2. Books on the Portal
One of the 36 distinct resource types available on the Portal to researchers, of which there are 6,073 items, is the designation of book. Per the University of North Texas Digital Libraries’ controlled vocabularies for resource types, one can classify an item as a book if it is a bound primarily text based resource such as a “book, atlas, photojournal, ledger, etc.” (Controlled Vocabularies, n.d.). It is important to note there is a distinction between what is considered a book and what is considered a yearbook in this instance, as a yearbook is an annual publication by a school or organization.

When providing online access to digitized publications and books, there are challenges one must consider. First of these is legal ramifications of intellectual property laws such as copyright. While there are several resources to aid in determining the copyright status of a book like
The International Scientific Conference of Librarians
Western Balkan Information and Media Literacy Conference 2020
& 9th International Summit of Book

https://www.copyright.gov/help/faq/, the final determination of a work’s copyright status is left to the contributing partner. In most instances, book digitization projects center around volumes published prior to 1923, which are in the public domain and no longer under copyright. This is the case with the Correspondence Ledger as it was no longer in use by the end of 1902.

3. Harris and Eliza Kempner Fund
While there are several ways in which an item can be added to the Portal, this case study will focus on one item, and as result, will only discuss one method of having materials added to it.
In October 2015 the Portal was contacted by Anne Brasier, the then Executive Director of the Harris and Eliza Kempner Fund in Galveston, Texas. Brasier was seeking information on the digitization process as the fund had over 225,000 pages of historic materials stored locally, as well as materials donated to the Rosenberg Library in Galveston, Texas. Through discussion it was determined that a pilot project digitizing only a small portion of the materials would be an ideal start. Among the materials selected was a correspondence ledger (https://texashistory.unt.edu/ark:/67531/metapth798749/). The ledger, a bound volume primarily consisting of rice paper, was extremely valuable to the Kempner Fund as it documented nearly twenty years of correspondence of Harris Kempner, an immigrant from Poland who became a prominent business owner in the Galveston area.
The goal of The Portal to Texas History is to create digital surrogates of physical items for researchers to access without causing damage to the original. Access demands preservation of these types of materials. It is with this goal in mind that all aspects of the items are scanned, from front cover to back cover; including blank pages. Like many ledgers, the correspondence ledger begins with alphabetically tabbed sections, a sequence of 108 scans, all of which were left blank by Kempner. Copies of Kempner’s business correspondence begin to appear on the 109th scan and continue for 467 pages. What makes this ledger truly unique is its dual-sided design; when one is working with the physical item and they open it from the back there are copies of personal letters written in phonetic Yiddish. These being located in the back of the book run in reverse order from page 683 to 594. In all, the ledger has 1,430 pages whether they are numbered or not and is 42.892 cm wide by 34.798 cm high.

4. Steps to Digitization
The series queues that all projects work their way through begins with the arrival of materials. Materials received by the University of North Texas Libraries’ Digital Projects Lab undergo an intake inventory to ensure all items on the packing list are accounted for. Oftentimes, this is the first opportunity for assessment of the materials being digitized. This allows the Digital Production Librarian to note the condition of materials to be digitized, while concurrently determining all materials listed on the packing list are accounted for, as well as adding the project into the Digital Project Lab’s workflow systems. Through the evaluation process the condition of the ledger was determined to be relatively good considering the pages were rice paper. There were some minor tears and wear on the edges of pages, but the binding was still intact. With care one could turn pages and the Digital Production Librarian was confident that so long as a book cradle was used while scanning there would be little concern of damage or image distortion during the digitization process. The workflows utilized for the ledger, these systems included a wiki webpage, white-board, and a digital filing structure on a local server. Each project has a Digital Libraries Division internal wiki page set up for it that outlines the scope of the project and workflows utilized. Additionally, the majority of one office wall, approximately 12 feet long, has a partitioned magnetic dry erase board with magnetic tags representing each project moved through the partitions representing the state of work being undertaken.
After completion of the intake inventory for the physical items, in this case the ledger, items enter the queue to be scanned. Scanning of the ledger was completed on a SuptraScan Quartz A0, which is a large format overhead scanner with lighting and scanner elements built into an armature. The bed of this scanner is adjustable so it also acts as a cradle limiting stress placed on the binding and minimizing potential image distortion. Images for the item were captured as uncompressed Tiff files at a 1:1 ratio, in 24-bit depth, with a 400 pixels per inch (ppi) resolution, and an RGB color space (Standards, n.d.). Due to the fragility and semi-transparency of the rice paper making up the ledger a piece of acid-free paper was utilized beneath the front pages of writing to help minimize bleed through of the text on the next page. It was determined that this step was not necessary when scanning the back of the page, as the text would not be clearly seen or as easily read. Including the inside and outside of the covers, all pages, and dividers of the ledger there were a total of 1,434 unique files used to create the digital surrogate.
The initial quality control phase (Pre-QC), has a trained student worker evaluate the images to ensure resolution, file naming, image sequence, cropping and deskewing on created images all meet the internal standards of the department. If errors were identified in any of these areas the student would note issues, and notify full time staff to have the images affected fixed. If no errors were identified, the images moved on to the next quality control phase (Final QC), where a full time staff member also reviewed the images for scanning standards (McIntosh et al., 2017). Since the Portal works with such a wide range of resource types it was determined that it would be best to use a qualified Dublin Core schema (Metadata, n.d.) to describe the items in the digital collections. So when the quality control phases were completed, a metadata student worker was assigned the task of creating item level metadata for the ledger. Lastly, the images and the associated metadata files were added to the queue to be uploaded into the Portal to Texas History.

5. Nature of Access
Access to the Correspondence Ledger’s digital surrogate at https://texashistory.unt.edu/ark:/67531/metapth798749/ has allowed for 123 uses since being made visible on the Portal on October 25, 2016. Usage statistics are captured for all items each time an item is accessed. Additional uses are accrued for each 30-minute block of time an item is in use. Assuming access to the physical book was granted at the same rate, one would expect an increased risk of damage, whether due to natural oils of the hand, marring of the item with a writing utensil, or tears to the pages. The Harris and Eliza Kemper Fund, recognized the barriers reading the phonetic Yiddish personal letters in the back of the ledger posed to researchers and funded a translated transcription of the text through the yiddishbookcenter.org, which has also been added to the Portal at https://texashistory.unt.edu/ark:/67531/metapth847172/. One notable limitation to access of this historical record, as well as several others on the Portal, is the decline in researchers’ ability to
The International Scientific Conference of Librarians
Western Balkan Information and Media Literacy Conference 2020
& 9th International Summit of Book

read cursive script. This challenge has been identified and potential solutions are being sought out.
To ensure continued access to this and all other items made available via the Portal and the University of North Texas Libraries Digital Library, the Digital Libraries Division completed a self-audit using the criteria of the Trusted Repositories Audit & Certification: Criteria and Checklist to formalize processes and documentation needed for the operation of a trusted digital library (Trusted Digital Repository, n.d.). One aspect of this is to have an archival management system, for the Portal and the UNT Digital Libraries, that is a system called the Coda. It serves as the repository and dark archive for all digital content on the Portal and the UNT Digital Library.

6. CONCLUSION
Digitizing items like Harris Kempner’s Correspondence Ledger, The Portal to Texas History actively preserves the items it hosts online. In conjunction with its 436 collaborative partners, the Portal strives to continue to provide researchers with the small histories that can be used to gain a deeper understanding of the larger Texas histories.

7. LITERATURE
ARCHIVAL REPOSITORIES AND SPECIAL COLLECTIONS AS TOOLS FOR DESIGNING GLOBAL PEDAGOGICAL EXPERIENCES IN INFORMATION LITERACY THROUGH VIRTUAL EXCHANGE

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ABSTRACT

Over the past fifteen years my university librarian has partnered with me to provide essential informational literacy training for my students. The training content and activities include the use of electronic journals, bibliographical citation formats, critically analyzing information resources for peer review, Web and Internet strategies for the Information Age, using bibliographic software, and basic familiarity with global database subscriber tools. With the advent of Covid-19, we began these productive sessions in a synchronous format in a web conference with share screen features and live chat for questions and answers. This paper will outline how training for information literacy with rare books and special collections can be transformed from pedagogical fieldtrips and site visits into remote virtual experiences, thereby augmenting the students’ exposure to global resources.

In 2019, as I prepared for my Fulbright experience, I taught a special topic course on the Avant-Garde Art History of Eastern Europe and the Balkans. To augment the information literacy training of my students, I arranged a visit to the Special Collections and Rare Book Room of the Wolfsonian Museum of Decorative and Propaganda Arts in South Beach, Miami, Florida, USA. The library of the museum houses 125,000 rare books, periodicals, reference materials, special archives, and ephemeral items. The objects demonstrate the vital role that art, architecture, and design have played in shaping perceptions of the modern world, and are essential to understanding global avant-garde art movements from 1850-1945. Librarian Dr. Nicolae Harsanyi, the Wolfsonian rare books cataloguer and expert on Central and Eastern European materials pulled over fifty first editions for the students to see. The effect was spectacular, as we had already read many translations and reprints of the works in question. Seeing the actual artifact, the graphic design associated with the publication, and the historical, material objects themselves was a revelation for the students.

Then, in the fall of 2019 I had the opportunity to explore Marinko Sudac’s private collection of avant-garde periodicals in Zagreb, Croatia, which is far more extensive and specialized for the course I am developing. In this paper I will demonstrate the integrated information literacy assignments for my art history course on the Avant-Garde Art History of Eastern Europe and the Balkans as I prepare to build on the local electronic resources, the Wolfsonian holdings, and the Marinko Sudac Museum of the Avant-Garde. I will attempt, through remote video conferencing, to have my students engage with the archivists and librarians as they visit the archives in Miami, Florida and Zagreb, Croatia as they develop a global perspective on information literacy and experience the visual design of information in the early twentieth century during the two World Wars. The course will be redesigned for the spring semester of 2021 including the tripartite set of information literacy assignments and library instruction. As students study the material it will raise their level of critical thinking as citizens in a global society, who are able to think, analyze, and make informed decisions by comparing transnational art movements that traverse political and geographic boundaries.

Key words: Information literacy, Rare book librarianship, special collections, Avant garde (Aesthetics), Graphic design (Typography), Book design history, Book design exhibit, Virtual cultural exchange
CIRCUITS OF POWER IN QUANTUM ORGANIZATIONS: MEMRISTORS FOR POST-PANDEMIC CONSCIOUSNESS

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ABSTRACT
This paper benefits from circuits of power framework in social science as well as memristors and quantum mechanics in natural sciences in order to provide a novel explanation for organizational memory and consciousness. With respect to this, it discusses first circuits of power for information systems then memristors and their roles in human consciousness, and concludes with suggested implications in pandemic and post-pandemic era, benefiting from the frameworks of quantum organizations and systems.

Key Words: Quantum Mechanic; Memristors; Post-Pandemic Consciousness

INTRODUCTION
The quantum mechanics offers a new paradigm for the understanding and utilization of organizations and systems, for which circuits of power framework provides an understanding of power relations and resistance at different societal levels. Meanwhile, memristors and memristance is a recent contribution to electrical circuit theory, incorporating memory into resistance, which in turn is suggested by recent authors to explain consciousness in human mind. Accordingly, this work-in-progress paper suggests that memristors can also be used to make better sense of organizational and social memory and consciousness, which could also help becoming more ready for the post-pandemic era, approaching within the quantum paradigm.

The paper is based on a basic assumption that individual entities and organizational or social entities are all considered systems and can be interlinked with each other. Beyond this, it could even be possible to benefit from the same frameworks or models to make sense of each of them, either separately or together (One example of which could be found in our other submission to the conference, Medeni et al. forthcoming).

Accordingly, the paper first introduces circuits of power for information systems and organizations, then discusses memristors and their roles in human consciousness. The paper is then concluded with possible implications in pandemic and post-pandemic period, benefiting from the frameworks of quantum organizations and systems.

Circuits of Power for Organizations and Information Systems
Electrical circuit theory is applied into social and managerial sciences by different authors (For instance, MacRae et al 2008). As one of the note-worthy applications, Clegg’s (1989) ‘circuits of power’ framework also illustrates “power as flowing through interacting circuits”:

- the episodic circuit focuses on micro episodes such as interpersonal dealings
- the dispositional circuit is concerned with meso organizational norms, policies, and routines,
- the facilitative circuit addresses the macro socio-regulatory structure and cultural context.

“The circuits (re)constitute each other through interactions at transitory ‘obligatory passage points’, in which the taken-for-granted rules and norms constituting practices are negotiated and fixed.” (Simpson, Clegg, Freeder 2013)
As suggested by Smith et al. (2010) “power is never one-way traffic: an A rarely gets a B to accede to direction without some resistance” (p. 466) and it incorporates not only employee resistance (to management) but also management resistance.

**Memristor and its Role for Human Consciousness**

In the original circuit theory, resistance, together with capacitor and inductor are the three existing circuit elements that “depend on relationships between pairs that control how electricity flows, how it gets stored and how it changes as it moves through a circuit:”

- resistor (voltage + current)
- capacitor (voltage + charge)
- inductor (magnetic flux + current)

It is suggested that “there should be a fourth circuit element governing the relationship between the ‘missing’ pair — charge and flux”, as the term memristor (memory + resistor) that would “operate like a resistor with memory” is being coined by Chua (1971). Accordingly Memristor’s resistance (memristance) would not be constant but dynamic, “determined by the history of the current that had flowed through the device”, (Volk 2018) Since its introduction, Chua’s theoretical work has received mixed reviews, however, due to new scientific developments, it seems to regain significant attention.
The dynamic resistance with memory could be a useful contribution to making more sense of the interactions at micro, meso and macro levels of Clegg’s ‘circuits of power’ framework. While resistor pairs with voltage and current, memristors complements this by pairing with the remaining charge and flux. The approach could also pave the way to provide a better understanding of organizational memory and consciousness, which benefits from those of individuals, based upon the theory of “orchestrated objective reduction,” or Orch-OR. (Volk 2018)

Suggested by Hameroff and Penrose (Penrose, 199, Hameroff, 2012, Hameroff & Penrose, 2014), “Orch-OR proposes that consciousness originates from microtubules and actions inside neurons, rather than the connections between neurons”, benefiting from quantum mechanics, according to which “movements are unknown until they’re observed that is also referred “as a wave ‘collapsing’ into a single state.” However, while traditional quantum mechanics posits that “an observation, or consciousness itself, causes the wave to collapse, OR proposes the opposite: The collapse gives rise to consciousness.” (Credit: Alison Mackey/Discover in Volk 2018)
So in our social interactions, it could again be each collapse of the wave function that yields a conscious moment, resulting in organizational memory, as well as ability to learn and unlearn (Zehir, 2019). We could also identify societal microtubules that could operate as memristors. These could also be combined with other quantum concepts such as superposition and entanglement for new interpretations and inferences for information science and organizational management.

**Quantum Organizations and Systems in the Pandemi and Post-Pandemi Era**

In more general terms, the quantum mechanics offers a new paradigm for the understanding and utilization of organizations and systems. The quantum paradigm accommodates multiple and relative perspectives, uncertainty, contextuality and multiple possibilities, since “events and facts may not be explained by a simple observation and reflection”, and is “primarily based on creating awareness and consciousness among employees of an organization (Kilmann 2011).” (Taşdelen & Polat, 2015, pp 572-573)

The pandemi as the result of Covid-19 can be a particular example for this quantum mechanics. Currently the consequences of the pandemic and post-pandemic period is not certain, while there are numerous views on possible positive and negative scenarios with crucial impacts on different societal levels, particularly on power relations and administrative regimes (For instance, Jennings 2020, Mérieau, 2020). It seems the whole world is expecting to see which scenario will unfold, or, in terms of quantum mechanics, into which single state the pandemic wave will collapse, which, perhaps, will then give rise to our consciousness that will in return influence interactions at micro, meso and macro levels within the circuits of power. Within these circuits of power, not only resistance but also memristance will enable determination of the related interactions and their consequences, supporting both movement (physical action and accord) and memory (intellectual and organizational record).
Accordingly, this paper makes a brief conceptual introduction to how quantum memristors could be used for (post-)pandemic consciousness and action (movement). Conceptually, the combination of memristor and quantum aspects such as superposition and entanglement could be very promising in information and communication sciences” (Salmilehto et. al, 2017, Kiyak, 2020), however, surely they need to be elaborated further and tested in real life circumstances. Perhaps, one possible elaboration could be based on the view that while resistors could underline interactions as part of existing conditions or knowledge, memristors could underline the past-to-future direction for changing conditions and new knowledge, complementing each other. Here, memristors’ membrane-like aspects that enable cross-realm refractive interactions could be also put under spotlight.

REFERENCES

WBIMLC 2020


USE OF ECVET IN RECOGNITION OF THE LEARNING OUTCOMES OF FORMAL AND NON-FORMAL EDUCATION

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ABSTRACT
The European Credit System for Vocational Education and Training (ECVET) is a credit transfer system developed for transferring, recognizing and accumulating knowledge, skills and competencies acquired through different learning pathways in vocational education and training (Vet Express, 2019). It is a tool making it easier for individuals to get validation and recognition of work-related skills and knowledge acquired in different systems and countries. It increases the compatibility between the vocational education and training (VET) systems in locations across Europe and the qualifications they offer (EU Commission, 2019). Ecvet facilitates the identification of knowledge, skills and competences developed during voluntary activities, in a family or work environment or during leisure, validation of learning outcomes, documentation of learning outcomes (Ecvet Secretariat, 2019). It is both used in non-formal, formal and vocational education. It is a tool supporting lifelong learning education, international mobility and prior learning. This study will handle ECVET as a learning and mobility tool in formal and non-formal education and will provide insight and information about the use of ECVET in implementing projects.

Key Words: ECVET (European Credit System for Vocational Education and Training, VET (Vocational Education and Training), Formal Education, Non-formal Education

INTRODUCTION
The European Union has many tools which enable the transfer, recognition and accumulation of assessed learning outcomes, to get a qualification. The European Credit System for Vocational Education and training (ECVET) is one of these tools, which enhance the individualized learning experience. ECVET stands for “The European Credit system for Vocational Education and Training”. It is a major European initiative for international mobility and mutual understanding, which is being rolled out between 2011 and 2015. It is a means of recognizing learning in one country so that it counts towards a qualification in another (ECVET, 2014). The European Parliament and the Council of the EU adopted the ECVET recommendation in 2009 and invited Member States to create the necessary conditions and adopt measures to apply the system to all VET qualifications. External evaluation of ECVET implementation was carried out in 2013 (ECVET, 2019). ECVET supports the mobility of European citizens and facilitates lifelong-learning process. Thanks to ECVET, recognition of the learning outcomes of an individual will be easier. ECVET supports the promotion of learning mobility. With ECVET, individuals are able to complete their education in different countries and in different institutions.

ECVET was necessary because of the problems on the training of qualified personnel required by competitive economies and sustainable development models and ensuring participation in vocational training, the need for the “mobility” of the labor force to be in line with global transformations and the common target market, lack of transparency and mutual trust, approval/recognition mechanism among existing vocational systems in Europe and problems in the accumulation and recognition of learning outcomes in different countries (ECVET Policy Document, 2019).
Mobility includes exploration and preparation visit of students, mobility with a working experience or vocational training, vocational education learner mobility under a specific agreement, mobilities in which learning outcomes acquired abroad are recognized (mobilities using ECVET tools). Before the mobility, partnership is established between the sending and host institution, Memorandum of Understanding (MoU) is signed, learning outcomes for mobility are determined, methods of monitoring and evaluation of learning outcomes are determined, validation of learning outcomes are explained, learning agreement is signed. Units of each learning achievement are determined by the competent authorities at the national level. Learning outcomes can be obtained in different environments, at different times through different learning paths. Learning outcomes can be transferred and accumulated between qualification levels or types. ECVET provides a framework for recognition and validation of learning outcomes in vocational training (ECVET Policy Document, 2019).

**USE OF ECVET**

It provides a better understanding of the qualifications of the learning outcomes and enables the comparison between the countries. When ECVET is used for learning mobility, the learning outcomes expected to be achieved are clearly accepted by the partner institutions and specified in the Learning Agreement. Therefore, everyone, sending organization, host organization, students have a common understanding of mobility objectives. Recognition of learning outcomes and validation of them are within the frame of the mutual trust of the individuals. Mobility periods of the individuals are programmed with more comprehensive agreements. The organizations agree upon the terms in which the credits students get from abroad shall be validated and recognized. These agreements are formalized in Memorandum of Understanding (European Commission, Visual and Audial Execution Agency, 2012). For the validation of learning outcomes achieved abroad, staff in the sending institution will consider documentation relating to the assessment of learning outcomes, as provided by the host institution, and will compare this to that which has been agreed in the Learning Agreement. Validation is normally achieved where expected and assessed learning outcomes are sufficiently consistent and adequately documented. Final decisions will additionally take into account the specific context of learning and assessment taking place during the mobility period, including any possible language barriers that learners may have faced in the host organization and country. Recognition of learning outcomes is the validation of the achieved learning outcomes through the award of credits, units or qualifications (ECVET, 2019).

The quality of assessment is essential for validation and recognition. It is therefore, important to consider the integrity of assessment which should be valid, reliable, flexible and fair and based on evidence that is valid, sufficient, current and authentic. The transfer of credit for achieved
learning outcomes has three stages: The hosting institute assesses the learning outcomes achieved according to the transparent criteria agreed with the sending institutes prior to the mobility and records them in a learner’s personal transcript, the home institute checks that the agreed procedures have been followed and validates the credit as a suitable record of the learners’ achievement. If necessary, the home institute presents the documentation to the relevant competent body in the home country which determines whether or not the agreed quality criteria have been met and the home institute and/or the competent body of the home country then recognise the learning outcomes that have been required (EMEU, 2017).

The validation and recognition of learning outcomes achieved abroad that do not count towards a learner’s home qualification

- ECVET principles can also be used for mobility periods where the learning outcomes achieved do not count towards the qualification which the learner is undertaking at home. For example ECVET principles can be used to: Improve the validation and recognition of both key competences (such as foreign language skills) as well as more technical skills and competences.

- Enrich the learners learning pathway by acquiring abroad the knowledge, skills and competences which they would not have had the possibility to achieve in their home institution (for example, because of the differences in technologies used or because of the variety of products).

- Help VET providers to respond to certain labor market needs by sending learners abroad for units they cannot deliver themselves (for example, because of the investment necessary to purchase the technology). For the same reasons, VET providers may be able to attract new learners from abroad. For these situations learning outcomes for the mobility period are negotiated and agreed (between the home and the host institution and the learner) to create ‘mobility units’ (or customized units) which can be recognized and recorded on the learners transcript or recognized as additional credit (on top of the qualification being undertaken by the learner). Many AOs already offer a service to accredit customized learning. Most do this by developing units of assessment for learning programmes. These units follow the same design principles as those used in the QCF with learning outcomes, assessment criteria, level and credit value. Many will award credit for completion of units. In Wales, the Quality Assured Lifelong Learning Pillar (QALL) of CQFW provides a formal process for doing this, which is quality assured by the Welsh government. In Scotland, colleges and some other organisations are Credit Rating Bodies approved to develop programmes for inclusion into the Scottish Credit and Qualifications Framework (SCQF). (ECVET, 2014).

CONCLUSION

ECVET is a European recognition and assessment tool which makes the learning process of the individual visible. It is supporting the mobility activity of the student and enables the transfer of the credits from one learning system to the other system. In order to contribute to the vocational education and mobility activity, use of ECVET should be promoted and ECVET should be disseminated. National ECVET Experts, National Agencies, VET facilitators and providers should cooperate and provide individuals with required training and VET materials.
References
INFORMATION LITERACY AND KNOWLEDGE ECONOMY: THE BROAD TECHNICAL CONCEPTS FOR NIGERIAN LIBRARIES

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ABSTRACT
Information has been described as the fifth factor of production. With the increasing rate of information explosion and the emergence of new techniques and technologies in information handling, information literacy has become an inevitable tool to harness the knowledge economy. As the libraries are the hub of knowledge, the Nigerian libraries are at the centre stage of information literacy trainings to equip patrons for the knowledge-based society. This paper therefore examines the concepts of information literacy and knowledge economy within the Nigerian context. Key elements of information literacy and knowledge economy were identified as well as the role of Nigerian libraries in information literacy and knowledge economy. Information literacy was identified as a prerequisite for participative citizenship, social inclusion, creation of new knowledge, personal empowerment and lifelong learning.

Keywords: Information, Information Literacy, Knowledge Economy, Nigerian Libraries, Nigeria.

INTRODUCTION
Information is the hinge on which the survival of any society rests. Information in this era is growing at an alarming rate in the society such that every person irrespective of status needs information for one thing or the other. It could therefore be said that information is compulsory in the present day economy as information is needed at every point in time. Information Literacy is the process of knowing when and why information is required, where to find it and how to evaluate, use and communicate it in an ethical way. Information Literacy is the combination of all the skills that required for the effective and maximum use of information. Information Literacy is the ability to gather, organize, filter and evaluate information and to form valid opinions based on the results.

The information literacy has been used as a collective term covering all or several of literacies such as computer literacy, digital literacy, hyper literacy, information technology literacy, interactive literacy, multiple literacy, network literacy, oral literacy, internet literacy, reading literacy, water literacy and visual literacy (Naik 2014). In fact, information literacy is one of the key competencies required by all in this era of the knowledge economy.

It is the major ingredient in decision making and assists in reducing the degree of uncertainty. Information and its use are as old as man. Indeed, without information there cannot be communication. Information literacy may be defined as recognition of when and why information is needed, where to find it, how to access and evaluate, use and communicate it in an ethical manner. According to Boeriswati (2012) information literacy is the ability to identify, understand, interpret, create, communicate, and compute information, using printed and written materials associated with varying contexts. It is widely recognized as a crucial competency that is necessary for success in education and in lifelong learning. Information literacy is considered as an intervention tool for socio-economic empowerment in a globalizing world to stay ahead in a competitive world with knowledge superiority. Information literacy is especially important in the context of changing global economy where knowledge-based economy supersedes other forms of economy such as agrarian economy and industrial economy, in terms of economic power of the nation and socio-economic empowerment of citizens most especially in developing countries like Nigeria. Nigerian libraries as custodians of information management, provision and dissemination, are the fulcrum of information literacy embedded in various information literacy programmes.
INFORMATION LITERACY CONCEPTS

Information literacy skills is the ability to understand when and why you need information, where to find it, and how to evaluate, use, and communicate it in an ethical manner (CILIP, 2012). Information literacy is the set of skills needed to find, retrieve, analyze, and use information. The Twenty-first Century has been named the Information Age, owing to the explosion of information and the information sources. Information literacy skills entail equipping the potential users with the critical skills which will help them to become independent lifelong learners. These skills will enable users to apply their knowledge from the familiar environment to the unfamiliar. According to Malliari, Togia, Korobili and Nitsos (2014), information literacy involve all kind of programmes, designed to help users in identifying the information needs, selecting appropriate information resources and providing effective means of using such resources in solving problems or meeting information needs. For better results, the instruction should be of relevance to users’ lives, learning styles and information requirements. Similarly, Sasikala and Dhanraju (2011) define information literacy as new methods of teaching information resources use, combined with problem-solving techniques in order to develop, promote and assess critical and analytical thinking of users, based on available information technology in the contemporary environment. However, most of the authors interested in the field of information literacy concluded that there should be need for information, the resources available, how to find information, the need to evaluate results, how to work or exploit results, how to communicate or share findings and how to manage findings. Information literate people are those who have learned how to learn. Here each of this literacy is necessary to understand specific process has special importance. The users who inculcate in themselves with new and updated methods obtain the quality of creating meaningful work. The whole concept of information literacy is to move from text-based learning to resource-based learning. Chartered Institute of Library and Information Professionals (CILIP 2012) describe information literacy skills as attributes required to be information literate which are understanding of a need for information; the resources available; how to find information; the need to evaluate results; how to work with or exploit results; ethics and responsibility of use; how to communicate or share your finding. Information literacy is an essential part in the lifelong learning process, which empowers individual lifelong learners to acquire their life skills, soft skills and vocational skills throughout their lifespan to take part in their social, cultural, vocational and professional life.

KNOWLEDGE ECONOMY CONCEPTS

The explosion of information and the advent of information and communication technology brought about globalization and technological revolutions which transform the contemporary economy into the knowledge economy (Hadad 2017). According to the Author, a new form of organizations and work govern the world of business, demanding the rapid development of skills, solid knowledge and greater responsibility in the knowledge economy. As such, the society becomes a learning society, adapting to the new systems which aim at the formation of people able to contribute to the development of their own competencies, to integrate fully in the socio-cultural context in which they live. The concept of knowledge economy is based on the view that information and knowledge are at the centre of economic growth and development. The ability to produce and use information effectively is thus a vital source of skills for many individuals and such skills can be acquired through information literacy (OECD, 2000). In the knowledge economy, intangible assets, such as knowledge and information management, become the new core of competencies. Today’s world is knowledge-based such that it is a world of cognitive domains, where ideas are worth billions, while products cost less. The knowledge economy calls for a rethinking of the theory of the factors of production in the sense that the traditional factors become secondary and knowledge becomes the essential component of the system of contemporary economic and social development.
Knowledge creation, acquisition and knowledge development within an organization such as a library is a source of competitive advantage. As such, any library or organizations that use their knowledge as a source of competitive advantage are called “learning organizations”. Knowledge in the form of intellectual property or intellectual capital, replaces labour and capital as traditional production factors. A knowledge-based organization can inspire a new entrepreneurial spirit and motivate managers to be concerned about transforming the organization into an organization capable of capturing, applying and developing value as a result of the implementation of performing technologies.

There is no longer a problem of location in the Knowledge economy. Thus, everything is becoming virtual and therefore global if appropriate technology and methods are being used. Low knowledge intensity products or services cannot request relative prices over comparable products with enlarged knowledge. The context is highly important for the KE. Thus, price and value differ a lot according to the given period of time and according to individuals. Identical information or knowledge can have a different financial value in various contexts. Human capital skills add value to corporations, but, despite this, competencies are not usually evaluated by companies in their annual statements (Ricceri, 2008, Tocan, 2012). The benefits of teaching critical thinking and information literacy skills are undeniable. Many studies prove empowered learners who are able to find, use, and evaluate information effectively are more successful in the classroom.

THE ROLE OF NIGERIAN LIBRARIES IN INFORMATION LITERACY AND KNOWLEDGE ECONOMY

The role of Nigerian libraries in information literacy and knowledge economy cannot be overemphasized. There are important aspects with regard to the role of Nigerian libraries in information literacy. Libraries will take an effective role in understanding the need of their clientele, the learners. They need to know how people learn and how the provision of information and information resources contributes to learning. Libraries should serve not only as repository of information and place for quiet contemplation but should be a dynamic gateway to information. As such, they should provide active laboratory for students and faculty to explore investigates and retrieves information wherever it may be found locally or virtually. Libraries act as partners in information literacy education. They should be able to take a lead role in developing and delivering learning support strategies to ensure the true meaning of Information Literacy. Librarians act as computer literacy mentors. They should be able to assist users in two core skill areas. One is the World Wide Web (WWW) and the second is library databases as database builders. They should provide access to completed studies and researches. Librarians are excellent guides in determining sources that are available. They should provide users with limitless warehouse of information. As able troubleshooters, they should possess and practice a medium of technical expertise, trouble shooting skills and assist users in interpreting incorrect messages or how to get out of a problematic solution. The librarian must not only be proficient with the wide range of information technologies available today, but they must be able to work with teachers to install information literacy skills in their students.

CONCLUSION

The opportunities embedded in globalization of information explosion brought about by information and communication technology are enormous and requires that libraries and librarians in Nigeria key in into the project of knowledge economy through exploration of information literacy concepts. In doing this, librarians need to possess requisite skills and knowledge to propel their services and market their products by meeting the needs of patrons and positioning the library in a pride of place in the new normal of the knowledge economy.
References
The book is dead!
Long live the book!

Reflections on e-books –
diversity, growth, use

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Central idea: transformations

**Books**
- Books are changing – in transition from *print* to *electronic*
- *pBooks* to *eBooks*

**Libraries**
- Most digitization efforts in libraries are micro, even nano in scale
- *Mass book digitization* is on industrial scale
  - causing an industrial scale revolution in technology, services & use – in and beyond libraries
- And *BIG* transformations in libraries & library use
On disappearance of print books

**pBooks**
- Many elegies
- Lamentations the way we experience books above & beyond reading
  - physicality of books
    - heft, texture, scent
  - we have a pile, a collection

**eBooks**
- Many critiques
  - “they lack the majesty, the aura of the artifact” (Lynch, 2009)
- But they are striving. And how!

Books: a brief look back

**Civilizations, cultures**
- Since they appeared some 3 millennia ago books were critical for any/all civilizations, cultures that wrote
  - linked to the desire of humans to create lasting records
  - represent human beliefs, memory, achievements & scholarly record

**Technology**
- Since beginning to this day they were connected with & realized by many, very different technologies
  - and yet, despite all changes they remained books
A few historical examples...

**Book: wood & gypsum**

18th dynasty in ancient Egypt, circa 1550 B.C.E.

Word of Khakheperaseneb
A literary discourse concerning personal and social chaos

**Book: clay tablet**

600’s B.C.E.
Royal Library at Nineveh in Babylonia.
Chinese bamboo books
date
back to
500
B.C.E.

First (credited) printed book “Diamond Sutra”
China 868 C.E. - woodblocks
Amati paper (fig bark) book – Maya, North America, pre-Columbian
called “Dresden Codex”
~ 14 century

Ibn al-Haytham (965-1040 C.E.)
“Book on Optics”
1021 C.E.
His studies of the eye gave the first modern understanding of lens, retina and optic nerve, as well as the mechanics of vision and perception.
And then in Europe came printed books

Johannes Gensfleisch zur Laden zum Gutenberg
(c.1398-1468)

Put together four skeins of technology

- paper
- ink
- movable type
- printing press

He was not the first to invent printing... Korea, China were before... but...

Mass production of books that followed changed society since then over 130 million books published (Google)

And now from pBooks onto eBooks

- No sculpture, yet, commemorating eBooks
- But eBooks are the fastest & most massive globally spreading books in book history

Where the World goes to read...

World eBook Fair, featuring over 3,000,000 eBooks; organized by World Public Library; originally by late Michael Hart (Gutenberg Project)
In the grand scheme of things
all interact & all are transforming

**eBooks**

- Producers - makers of eBooks
  - Vendors (aggregators) – putting it all together

**eBook readers**

- Physical – devices
- Virtual – in a device

**eBook users**

- Institutional – libraries, schools
- Direct – individuals, groups

---

**eBook makers, suppliers**

**Producers**

- Concentrate on scanning books
  – and then providing access
- Libraries = micro producers
- Mass producers = industrial scale

**Vendors (aggregators)**

- Concentrate on putting together many collections of eBooks
  – and then provide unified access, add value - search, link ...
- Book databases
Libraries as producers – first generation

**Digitization**
- Globally, great many libraries digitized books from own collection
- Many are rare, historical, classics
  - opened treasures to public
  - very well received
  - important for scholarship & education
- But all together small in numbers

**A few examples from many**
- **British Library Online Gallery**
  - 30,000 items; among them many rare books
- **Gallica** - Bibliothèque numérique - Bibliothèque nationale de France
  - 5 mill. items, 160,000 books,
- **World Digital Library**
  - cultural treasures from around the world; so far about 20,000 items; from about 193 countries

Mass digitization projects – second generation

**Pioneered**
- Industrial scale of eBook digitization
  - innovative
    - applications of new technologies
    - some partnerships with libraries
- Raised many issues & disagreements
- Global

**Major projects**
- **Project Gutenberg**
  - first, gave ideas to all; over 140,000 free eBooks
- **The Universal Digital Library “Million Book Collection”**
  - global cooperation;
- **Google Books**
  - largest; “Search the world’s most comprehensive full-text books”
  - many libraries & countries cultural, legal controversies
The International Scientific Conference of Librarians
Western Balkan Information and Media Literacy Conference 2020
& 9th International Summit of Book

Example: **Project Gutenberg**

- *Free ebooks - Project Gutenberg*
  - Book Store
  - Book Catalog
  - Bookshelf
  - More Power
  - Category
  - Contact Info

*Project Gutenberg *is a free library of over 40,000 free ebooks. Choose among free epub and Kindle ebooks, download them or read them online. You can use conversion software to convert them to HTML. You can use Project Gutenberg ebooks on any device, on all operating systems, and on all devices. You can use Project Gutenberg ebooks on any device, on all operating systems, and on all devices. You can use Project Gutenberg ebooks on any device, on all operating systems, and on all devices.

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  - Search for languages
  - Search for formats
  - Search for topics

- *Help and Information*
  - About Project Gutenberg
  - Project Gutenberg FAQs
  - Project Gutenberg Help
  - Project Gutenberg News
  - Project Gutenberg Documentation

Example: **Universal Digital Library**

- *The Universal Digital Library*
  - Million Book Collection

- *Enter any word in the book title. e.g. Operas*

- *Advanced Search | Browse the Collections*

- *Mirror Sites: China North, China South, India*
Next generation: Interaction in eBooks

**Major innovation**

- Adding potential for interaction is a giant step in evolution of eBooks
  - using dynamic web vs. static scanned displays
  - makes eBooks into something else – Web 2.0

**pBooks vs. eBooks**

- Interactive capabilities embedded within eBooks provide clear & even huge advantages over pBooks
Vendors (aggregators)

What?
- Bring together eBooks from different sources & publishers & make it available to libraries & institutions; also users
- Add various significant capabilities - interaction
- Some do it via specific software or apps

Who?
- Large, universal ones taking the role of superbookstores
  - with some interactivity
- Smaller, more specialized, aimed at specific markets, topics
  - particularly libraries & similar institutions
  - many most innovative

Sample of vendors ... all online only

Giants with global reach
- **Amazon** — a super store & bookstore, e- & pBooks
  - 2019: for every 100 pBooks sold, 180 eBooks were sold
- **iBooks** — Apple repeating the music formula to books,
  - “Apple Books is the single destination for all the books you love, and the ones you’re about to.”
(While we do not call them “vendors” or “aggregators” that is what they are)

Specialized or niche
- **ebrary**: over 1 mill titles in many subjects. Interactive capabilities. Academic, Community College, & Public Schools Government Libraries
- **CLASSZONE** — large global text book publisher turned to eBooks. Extensive interactive e-texts for middle & high schools. Interactive learning. “Follow these simple steps to find online resources for your book.”
- Other vendors offer similar capabilities, e.g. **OverDrive**, **Gale, Netlibrary**
ClassZone example of an interactive biology text for high school

OverDrive: Example of a vendor providing variety of resources & apps for libraries, schools etc. for access & variety of users, digital natives included
Example of a **public library**: audio & eBooks to download

**eBooks**

- [OverDrive](https://www.overdrive.com)
- [New York Magazine](https://www.newyorkmagazine.com)
- [Rutgers University](https://www.rutgers.edu)

**eBook readers**

**Physical**
- Devices used to display eBooks & other e-content
  - variety on the market
- Plus: portable, readability in various conditions, long battery life
- Goal: for the technology to seem to disappear
  - concentrate on content

**Virtual**
- Software for reading eBooks (& other e-content) on a computer & other devices
  - variety on the market
- Used also for acquiring & managing eBooks
Battle of eReaders on the go

Readers (physical)
Sample of most popular ones:
- Amazon Kindle
- Apple iPad
- Proprietary - not compatible
- These companies sell & couple a device & eBooks & other eMedia

Proliferation of formats
- Standards needed for interoperability
- Most used/popular:
  - pdf (Adobe)
  - ePub (International Digital Publishing Forum)
- Other formats available

Amazon Kindle

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<tr>
<td>Fire HD 8 Tablet</td>
<td>$59.99</td>
<td>8&quot; 1024x720 display, Alexa Handsfree, up to 10 hours of battery life</td>
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<td>Kindle Paperwhite - Now with a built-in</td>
<td>$112.99</td>
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Rutgers
Apple iPad & Books

Comparing iPad models

Apple Books. An all-new chapter.

Apple Books is the single destination for all the books you love, and the ones you’re about to love. Browse the Book Store, join Oprah's Book Club, log in to what you’ve read and want to read, and listen to enthralling audiobooks. All in one place.

Battle of eReaders for reading on your device - computer, mobile ...

eReaders (virtual)
- Adobe Digital Editions – reads variety of formats
- Several other readers on the market – combine a bookstore with reader
- Vendors e.g. Overdrive, provide own readers for download

Software – platforms
- Independent of hardware; incompatible
- Some combined with bookstores
- Adding interactive capabilities – browsing, searching
- “Reading revolutionized”
eBook users

**Institutional**
- Libraries, schools, museums, organizations, agencies ...
  - free eBooks and/or with subscription/license
- Integrating with
  - other p & eResources – essential part of collection
  - other services

**User categories**

**Direct**
- Individuals
  - new: Patron Driven Acquisition (ebrary)
- Groups
  - children, adults, students, scholars, professionals ...
- Combined
  - groups from institutions, universities – e.g. courses, research projects ...

Libraries and eBooks

**Digitized old(er) books**
- Support tradition, culture
  - enlarge collection
  - attract interest for “buried” treasures
  - provide resources for education, scholarship
- Many libraries have a large number

**But now**
- Subscribe, license eBooks & other eMedia
  - from a variety of vendors
- Why subscribe or license?
  - provide innovative services
  - possible for multi locations
  - circulate as other books
  - go with digital natives
  - for some no alternative

Libraries continue the shift to e-collections, including e-books
eBook advantages for libraries

**Operations**
- Can’t be stolen, lost, mis-shelved
- Automatic circulation
- No additional space
- Management easier
  - software often included
- Easy collection of statistics - valuation

**Access**
- 24/7 from anyplace
  - but often restricted to own users (university, city)
- High demand books easily managed
- Merges with other services
- pBook= single concurrent user; eBook = many

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Advantage: Integrated collection & services

**eBooks**
- Combine with other resources – audio books, music, video, software ...
- Seamlessly connect with MARC records
- Both increase use

**Services**
- eBooks circulated as other books
- Popular with users
- Many public & school libraries offer access to variety of eMedia
- Circulation rising dramatically
**eBook disadvantages for libraries**

**Economics**
- Lots of $\$$, €€€, KM ...
- Funding a challenge
- Technology investments still high
- New competencies, (re)education needed

**Need for balancing**
- With print collection
  - still the major part for all libraries
- Still a good proportion of users are not there yet

**Mind-set changes needed & hard to achieve**

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**Digital scholarship & eBooks**

**Digitized old(er) books**
- Changed, broadened access
  - particularly old heritage & classics
- Opened new education & research areas
  - e.g. in digital humanities

**New generation of eBooks**
- Fast update as needed
  - cooperative authorship
- Aligns with digital scholarship
- "Journalization" in use of eBooks
  - sections as needed
Publishers & eBooks

Seeking adjustments

- Publishers struggling & searching for new models
  - inventory-free print-on-demand attractive (print isn’t dead yet)
  - distributing eBooks though vendors
    - profits??
  - authors looking for larger share of profit
    - samozdat versions attractive

Scholarly publishers

- Most convert all pBooks immediately to eBooks
  - integrating p- & eBook & journal publishing
  - aggregating from other publishers, large libraries & societies
  - providing use statistics to libraries
  - offering comprehensive (& expensive) packages

Example of SpringerLink, a large scholarly publisher
- many academic libraries subscribe
eBook use metrics –
new items for library statistics & reports

Importance

• To indicate various parameters of use, users, collection
• For policy, negotiation, valuation, justification
• Not yet standardized – various publishers & vendors provide different data

Example of metrics

• Downloads, views – sections, whole units
• Visits, sessions, searches
• Title reach (been used) – age of titles reached
• Cost per use
• Contrast to pBook use
• Turnaways

eBook use studies in universities

Growth findings

• Number of studies show significant increase in eBook use over time
  – gain of eBooks over pBooks
  – varies by discipline, but trend the same

Effecting use

• Cataloging eBooks & having them in OPACs increases use
• Students use more than faculty
• Non-awareness linked to non-use

Users do not know or care for term or concept “digital library” for them it is a library that, as always, has books – these ones a bit different

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WBIMLC 2020
Digital natives and eBooks

**Digital resources**
- Part of their universe
  - young predominate, but not only young
- Changing patterns how people read
  - & search for information
  - implication for libraries
- But information literacy still low – BIG role for libraries to improve

**Integration**
- Devices: Becoming better, ubiquitous, & cheaper
  - integrated with life
- eBooks are just books
  - to be read anywhere
- Libraries need to adapt to information age, not to alienate potential users, particularly the young.

**Conclusions**

**eBooks are succeeding because (part 1)**

**Mass digitization projects**
- Several high-profile projects made available great amount of classic & heritage books
  - many current too
- Raised availability & public interest

**Commerce**
- A number of companies (some old, some new) entered into eBook business
  - an industry is emerging
  - with competition, innovation, markets
- Transforming the landscape
eBooks are succeeding because (part II)

Scale, innovation
- Industry: producing
  - growing list of current titles
  - interactive capabilities
- Libraries: inclusion in OPACs, new services
- Publishers: reorienting
  - p & eBooks together, or eBooks alone

Technology
- eReader hardware & software better
  - evolving continuously
- Wild west in formats is cooling
- Costs are down
- Apps are better & easier

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eBooks are succeeding because (part III)

Social acceptance
- Innovation reached from early adapters to early majority – passing in the mainstream
- Cycle maturing:

But there are also social issues – a dark side
- Predicated on easy availability of technology, but
- Digital divide is real
  - with this, exclusion may be even growing
  - leaving out many
  - with what effects?
At the end

Thank you for inviting me!

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Thank you
Hvala
Gracias
Merci

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