BUILDING RAPPORT BETWEEN DISASTER MANAGEMENT AND LIS CURRICULUM: A STUDY

Vikas Singh Archana Shukla

Mr. Vikas Singh

Research Scholar
Department of Library and
Information Science,
Indira Gandhi National Open
University, Delhi-110068,
INDIA
Email:
vikassinghblis@gmail.com
Corresponding Author

Dr. Archana Shukla

Reader
Department of Library and
Information Science,
Indira Gandhi National Open
University, Delhi-110068, India
E-mail: archana@ignou.ac.in

Over the years the LIS field has adopted a diverse range of subjects to solidity and also extend its boundaries and therefore, to contribute in every domain of knowledge. As a result, it is pertinent to understand the common interests between the two distinct disciplines. The paper seeks to contribute some insights into whether Disaster Management (DM) as 'course content' could be integrated into Library and Information Science (LIS discipline). The idea is primarily built upon a review of literature which is conceivable for both DM and LIS at some extent. It also aims to identify and discuss two areas and their inevitability for one another. Further, the paper analyses the present status of Central Universities of Northern-India in terms of LIS programs incorporating disaster related 'course content' or atleast a part of it in their curriculum. The present study emphasizes for incorporating of 'Disaster Management' content in the curriculum. The study however, finds that a number of LIS programs have incorporated more disasters related topics in course offerings of the program themselves.

Keywords: Disaster Management, Libraries, Curricular Analysis, Collaboration.

INTRODUCTION

Libraries are the store-house of knowledge that manages literary heritages on which our modern civilization exists. Library and information science is an amalgamation of different disciplines. It is widely accepted as inherently inter-disciplinary, collaboratively linking with other disciplines (Kim, 2012). Further, the field has adopted and utilised "theories, philosophical basis, values, skills and methodologies" from other disciplines. The discipline believes in integrating and enlarging its curricula to accommodate different subjects. Traditional library science programs being reviewed and modified their curriculum to remain abreast with the changing demand of the market (Jin and Bouthillier, 2012). The status of the same at the international level is concerned, there are very few studies offered at different universities of Canada, United States, and Europe offers disaster or crises management related content either at the graduate or

undergraduate level. Some even offer the program at certificate level (Ingrassia, 2014; Lalonde, 2013).

It is nothing but the disasters, whether they are human-made or natural, that paralyses the function of any library. Disaster is "sudden collapse of building due to an earthquake, fire, outbreak or faulty electric gadgets, explosives or arson. 'slow' water/rainfall, leakages in the library, busts pipes located in the stack and 'developing' or 'creeping' deterioration of library materials" due to moulding formation or termites activities among others (Adinku, 2003). It is something whose timing is unexpected, but consequences are enormously destructive. The biggest problem of disaster is that it brings a widespread impact on human, material, economic and environmental impact. So, disaster management and planning should be one of the most important aspects of library management. It has been found to be a neglected field in librarianship (Morgan and Smith, 1997). Let's take examples of many libraries across the globe gone through the great sufferings due to disaster such as Morgan Library, Colorado State University, and flood in Kashmir. Further, the fire at the Los Angeles Public Library, California, in April 1986, fire in National Museum in Delhi, India destroyed the entire collections on April 26 2016. They not only severely affected the infrastructure but also the socio-economic life.

Libraries are preserving cultural heritage and knowledge of a county. It is assumed that the growth and development of any country depend on how rich information literate a country is. The study first analyses the curriculum offered by some select central universities offering LIS content in Northern- India to understand the nature of DM shared with LIS. Here, an attempt has been made to encourage disaster management related content in the existing syllabus of LIS as it has become the need of the hour. The present study reviews the current state of curriculum and advocates for incorporating disaster management (DM) content in Library and Information Science (LIS) curriculum. The best thing about the courses is to include hands-on exercises uniquely tailored to prepare students for the profession (Marty and Twidale, 2011). This will give students an in-depth idea of managing disasters at different phases, i.e. before, during and after. This could easily be achieved because of the changing need and demand of the patrons which forced the professionals to reviewed and modify their curriculum to remain abreast with the changing demands (Jin and Bouthillier, 2012). Further, the results of the study will inform how to design and develop an interdisciplinary curriculum in LIS to better support DM in libraries.

WHY TEACH DM IN LIS?

Before moving further, it is crucial to understand why disaster management as a paper / content is necessary in the discipline of library and information science. Library disasters have the unique quality of being both unexpected and inevitable. Disasters can be caused by nature. "The library is vulnerable not only to fire, flood, wars and student riots but also negligence and poorly maintained buildings". They are smaller in scope but very destructive such as roof leakages, termite problems, dripping pipes, a mouldy book returned by a patron, a small fire set in the book return, a

window left open during a night of pouring rain. As 'unexpected' inability to manage some of them. It occurs so slowly that we suddenly realise that we are in a disaster that has been underway for some time and may continue for an extended period. We remain unaware till the time it reaches crisis proportions-building cracks, rodents, termites and insect activities. Managing disasters in Libraries are considered as many-faceted elements. It requires the effort of both local authorities and public, and the primary goal remain as to how to motivate people to act.

With the above-mentioned statements it is very much clear that how destructive a disaster could be so designing well-structured course content at the initial level, i.e. BLISc or MLISc could give the professionals to deal different disasters at some extent. A cursory glance of the above description on the subject shows that syllabus is lacking in uniformity and needs integration of Disaster Management in LIS curriculum.

REVIEW OF LITERATURE

Previous studies have shown that very few universities / institutions whether in Canada, United States, or in European countries have incorporated disaster, crisis management or related content in their curricula or fewer offer such programs (Ingrassia, 2014; Lalonde & Roux-Dufort, 2013; and Alajmi and Qallaf, 2018) and the literature scanned gives almost the same picture in case of India.

Alajmi and Qallaf (2018) give an insight into disaster and crisis management education within LIS curricula. Twenty-eight ALA –accredited

MLIS programs in four phases model and six LIS subject modules were also identified and evaluated to analyze the percentage of coverage of these topics. In 264 course syllabi regarding how to meet and responds crises and disasters were given low priority. It further emphasizes for incorporating disaster related content in LIS to empower librarians and library professionals during disasters or unpredictable circumstances. They have also come out with a model for crisis/ disaster management for LIS curricula. In like manner, Kim (2012) clearly demonstrate in his paper entitled "building rapport between LIS and Museum studies" the common interest between two academic disciplines museum studies and LIS and studied the curricular practices of both professions. It was also seen that several museum studies programs offer LIS-related content and same is in case of LIS programs. Further, Karisiddappa et al. (2004) emphasized on incorporating information literacy concepts in LIS curricula in different context. It was also mentioned that we are at the crucial point for determining LIS education role as a leader in research and teaching of information literacy. As we are aware that an information literate person needs to be aware of the obligation as a citizen in a democracy to make their voice heard, as well as critically critique existing knowledge and information.

Bishoff (2004) demonstrates in her paper "the collaboration imperative" regarding to foster collaborations of different disciplines. This is something which not only tells how to work in collaboration but also to understand the nature of work, skills, and knowledge required

performing task accordingly. In addition, Tibbo and Duff (2008) has given full support to the idea of multi-disciplinary and inter-disciplinary approaches. It further emphasizes on numerous opportunities for sovereign studies and the use of experimental equipment to enable the creation of new technologies and methodologies. In the similar directions, Blankson-Hemans and Hibberd (1994) examines the curricula and understand that faculty understands the trends and issues and their programs are delivering excellently to requisite skills. It also recommends for more effective positioning of LIS courses to students and need to cater more hand-on to prepare LIS students in a much better way.

Many more studies supporting the LIS discipline, based on LIS curricula has also suggested for incorporating topics, i.e. environmental scanning, culture, diversity, industry, and government regulations (Al-Qallaf & Mika, 2013; Pearson & Clair, 1998). They also should be trained in decision-making, crisis prevention, communication, information assessment etc. (Braquet, 2009; Bronstein, 2007; Bunce, Partridge, & Davis, 2012; Kash and Darling, 1998; Mei, 2007; Merchant, Elmer, and Lurie, 2011). Another side, some of the studies also argues that leadership qualities can't be taught in the classrooms rather they are acquired on the job (Blankson-Hemans & Hibberd, 2004; O'Connor, Smith and Afzal, 2017; Alajmi and Qallaf, 2018).

OBJECTIVES OF THE STUDY

The objective of this study is to identify a set of disaster management related topics in LIS curricula and make recommendations on how curricula can be improved better to prepare the professionals in managing disaster in their work environment. They are:

- to analyse select LIS curriculum offered by some select Central Universities in North-India;
- (ii) to review the current state of curricula and to recommend incorporation of DM courses in the LIS curriculum; and
- (iii) to suggest the measures for much comprehensive and inclusive LIS curriculum.

SCOPE OF THE STUDY

The present study is confined to the central universities offering courses in library and information science up to the master level. Of the fifteen (15) universities selected for the study, four (4) Central Universities have been excluded which do not offer the LIS courses (Jawaharlal Nehru University (JNU) and Allahabad University (AU) and other two. Moreover, the other two (2) universities which have not mentioned the course structure on their website (Central University of South Bihar and Hemwati Nandan Bahuguna Garhwal University). Of the fifteen total (15) universities (ugc.ac.in), eight universities are old, whereas, seven (7) are newly established (established by the Central University Bill, 2009).

METHODOLOGY

During the month of April 2020, an analysis was made to check the websites of all the select central universities of Northern-India; University of Delhi, Indira Gandhi National Open University, Aligarh Muslim University, Banaras Hindu University, Babasaheb Bhimrao Ambedkar

University (B.B.A.U, Lucknow), Jamia Millia Islamia, Central University of Haryana, Central University Jammu, Central University of Kashmir, Central University of Himachal Pradesh, Central University of Punjab, Central University of South Bihar and Hemwati Nandan Bahuguna Garhwal University, offering courses at different levels; BLISc & MLISc. The syllabus of Undergraduate (UG) and postgraduate (PG); BLISc and MLIS was being considered for the present study. It was also analyzed to ascertain if the LIS course has included DM courses in their curricula. The study, however, has excluded M.Phil. & Ph.D. and other such programs.

DATA ANALYSIS

Total thirteen (13) departments of the select central universities of Northern-India were selected for the study. Further, LIS curriculum including DM programs were identified from the course structure. LIS department list offering DM course content have been highlighted in Table. 1.

The table 1 indicates the list of departments of Library and information science of the select central universities of Northern-India, i.e. University of Delhi, Indira Gandhi National Open University, Aligarh Muslim University, Banaras Hindu University, Babasaheb Bhimrao Ambedkar University (B.B.A.U, Lucknow), Jamia Millia Islamia, Central University of Haryana, Central University Jammu, Central University of Kashmir, Central University of Himachal Pradesh, Central University of Punjab, Central University of South Bihar and Hemwati Nandan Bahuguna Garhwal University along with year of establishment and URLs.

Table 1: List of departments offering Disaster Management (DM) Courses

Sl.	LIS Dept. / Universities	Year of	URLs
No		Establish	
		ment	
1.	University of Delhi	1922	http://dlis.du.ac.in/#
2.	Indira Gandhi National Open University	1985	http://www.ignou.ac.in/ignou/stu
	(IGNOU)		dentzone
3.	Aligarh Muslim University (AMU)	1875	https://www.amu.ac.in/departme
			ntpage
4.	Banaras Hindu University (BHU)	1916	http://www.bhu.ac.in/arts/lis/)
5.	Babasaheb Bhimrao Ambedkar University,	1996	www.bbau.ac.in/new/dept/dlis
	Lucnknow (BBAU)		
6.	Jamia Millia Islamia	1920	www.jmi.ac.in/zhlibrary
7.	Central University of Haryana (CUH)	2009	www.cuh.ac.in/dlis.aspx
8.	Central University of Jammu (CUJ)	2011	www.cujammu.ac.in
9.	Central University of Kashmir (CUK)	2009	www.cukashmir.ac.in
10.	Central University of Himachal Pradesh	2009	www.cuhimachal.ac.in
	(CUHP)		
11.	Central University of Punjab	2009	www.cup.edu.in
12.	Central University of South Bihar	2009	www.cusb.ac.in
13	Hemwati Nandan Bahuguna Garhwal	1973	www.hnbgu.ac.in
	University		

Source: ugc.ac.in

Status of DM syllabus in universities in North-India

The discussion of this study is limited to 'disaster management' and incorporation in the LIS curriculum. Select departments of the Central

Universities offering LIS courses were identified for the study. Description of each program was thoroughly checked along with their specifications on the open web or on the respective websites of the department or

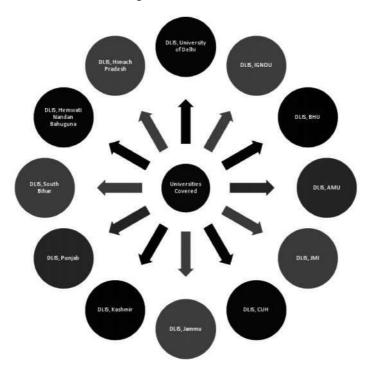
Table 2: DM "terms" figured in the LIS course

DLIS/Universities	Courses	Terms of DM in LIS Course		
DLIS, D.U.	BLIS	Integrated Library Automation, Networking Software, technological security and Software Securities Parameters.		
	MLIS	Emerging Technologies and Library Security Technology, RFID, Barcode, Smart Card and CCT.		
	BLIS	Disaster Management		
DLIS, IGNOU	MLIS	Preservation & Conservation		
DLIS, AMU	BLIS	Digital preservation		
.,	MLIS	Planning and Management of Academic Library System, Academic Library Buildings, Planning, basic elements in designing, Furniture and fittings.		
	BLIS	Conservation, preservation and Archiving		
DLIS, BBAU	MLIS	Digital preservation, Internet security, Library Security Technology, RFID, Barcode, QR Codes, Smart Card, Biometrics and CCTV, etc.		
DLIS, CUH	BLIS	Preservation and conservation of Library and Archive materials		
	MLIS	preservation (physical and digital), Preservation planning (Indoor and outdoor security challenges), Preservation of non-print materials		
DLIS, CUP	BLIS	-Available-		
	MLIS	Preservation and conservation of library material		
DLIS, CUK	BLIS	disaster management		
	MLIS	disaster management and Preparedness in Libraries		
DLIS, CUJ	BLIS	-Nil-		
	MLIS	-Nil-		
DLIS, CUHP	BLIS	-Nil-		
	MLIS	-Nil-		
DLIS, BHU	BLIS	-Nil-		
DI IG II G	MLIS	Preservation of library material		
DLIS, JMI	BLIS	-Nil-		
DI IC CUCD	MLIS BLIS	-Nil- -Nil-		
DLIS, CUSB				
	MLIS	-Nil-		
DI IC HNDCH	BLIS	-Nil-		
DLIS, HNBGU	MLIS	-Nil-		

university websites. The main aim behind analyzing the course content on each website was to checked if the course title mentions anything about disaster management terms. If the terms like "preservation," "conservation," "preservation planning (physical and digital)," "information/data/ software security" "preservation of non-print materials" "Disasters," "Disaster management," "Archive management" and so on were found in the course structures of the select universities. It was considered that such universities have realized the importance of DM in their curriculum and therefore could be a sign to introduce a full course in their curriculum. The table 2 highlights the terms related to disaster management in the LIS course curriculum, at different levels, in the select universities. Pertinently, here the focus is on both digital and physical potential disasters.

The table 2 gives us a clear picture of the DM course in the LIS curriculum. It is quite

remarkable from the table that except one university, rest all have not realized the importance of DM course in their course curriculum. In this era when we have become much vulnerable to calamities and disasters, it is incumbent upon LIS policy makers to make the curriculum interdisciplinary by introducing DM course that will eventually focus on the combating mechanisms, preparedness and mitigation of any kind of disaster. Though a significant terminology of DM exists in the syllabus of various LIS departments, it is however imperative to introduce either a full course on DM or some practical training must be given, to the professionals, on the emerging issues, like 'digital disasters' and so on. Moreover, while designing such course it is necessary to understand the importance and relevancy of such courses in the ever-changing job market.



Integrating Disaster Management content / courses in LIS curriculum

The LIS discipline has inherently interdisciplinary, multi-disciplinary or crossdisciplinary approach with courses and learning experiences that include LIS, museum and archival studies. Websites of the department of Library and Information Science or universities were checked and found that very few universities/ departments are offering 'disaster management or related 'course content' in their LIS curriculum. It was observed from the literature and scanning the websites of the universities that overall disaster management content in LIS curricula was relatively moderate and curricula studied having more traditional content aiming to teach library science students to ensure equality of access to the information rather dealing disaster / emergency management related content. Hossain (2013) says in support that in the producing skilled, trained and efficient social workers, universities and academic institutions have to incorporate the disaster management issues in their curricula so that the new generation of social workers handle the disaster situation efficiently. In fact, they should be given some practical training, mock-drills etc. for dealing the situation in a better way. It has been seen that generally, disaster/crisis management content is taught in context of existing courses, mostly in public communication, international politics, business strategy, public security etc. (Simola, 2014). In the similar direction, Rehman (2014) indicates that Disaster threaten human safety and damages/threatens to damage library building, collection or items, equipment, systems and services sensitization is necessary which could be achieved through initial and practice learning and incorporating disaster management (DM) content in curricula.

Further, the Central Board of Secondary Education (CBSE) has taken the lead in introducing this subject at school level, and this could prove very beneficial for students living in disaster-prone areas. This year, the University Grants Commission (UGC) in India asked universities to launch courses in disaster management which should be considered as a good sign (Kaur, 2009). It was realized that if departments start offering courses at an initial level as has been introduced by the Central University of Kashmir and IGNOU, to the LIS students. This will help LIS departments to make their courses more comprehensive and applied. These initiatives will not only make the person more capable of handling different disasters at their own level, but also at the same time, they would be capable of lessening the impact of it, if need arises. Thorough check and interactions reveal that Universities have realized the need of DM courses in LIS curriculum but lack of resources, lack of experts or due to some other reasons they are not able to do so despite their willingness.

It was also observed from the study that almost every LIS school in foreign countries, i.e. US & Canada has focused on enhancing the LIS curricula to enable LIS professionals to be able to plan for crises and provide information during and after crises/disasters (Tenopir, 2000). Some of the programs are in progress such as National Library of Medicine disaster information

specialist jointly organized by Medical Library Association, promotes the role of 'Information specialist' in catering disaster related health information resources. It also provides opportunities to enhance the skills needed to support the disaster workforce through training classes, monthly webinars, and connections with other similar interests. Another program being offered by DLIS, Sab Jose State University on crisis Disaster health informatics which is in two part. First part, specifically on crisis/disaster health information consisting of information crisis/disaster, source in information dissemination during pandemics and further second part, web-based information science education (WISE) for accessing the content though distance-mode.

However, the research indicates that LIS curricula may not fulfill these needs, the various reasons for which include a limit on the number and type of courses offered, restriction of the number of electives students can take, or the unavailability of faculty to teach certain courses (Saunders, 2015). So, there is a need of improvement in curricula as well as in other related areas.

SIGNIFICANCE OF THE STUDY

Librarians are preserving valuable knowledge for the present generation and posterity. They need to be aware with damages caused by the disasters and the latest tools and techniques available to avoid or lessen the impact of disaster which could be understood as one of the main reasons for incorporating disaster management as paper or part of it, in library and information science (LIS) discipline. The study will be a contribution for library professionals and literature on the different aspect of the disasters, i.e., prevention, planning, response and recovery, as well as for academic discourse for those interested in disaster management-related issues.

FINDINGS

The present paper demonstrates the disaster management and related curricula in LIS programs in select central universities of Northern-India to observe existing "educational practices, speculations and its future directions". It also provides a vision or future path to design and develop an interdisciplinary curriculum in LIS to better support or provide exposure to the students from their initial career to understand the disaster management related activities which would support in their future endeavors. The paper further, intends to encourage dialogue between two disciplines to promote understanding and innovative thinking, which will lead to a collaborative structure which will benefit purely to the library and information science. Further, the current LIS curricula do not strongly consider the disasters, societal calamities, and civil unrest that dominate the media and occupy the minds of individual communities. This shortcoming needs to be directly addressed if potential. Librarians, especially public librarians, are to be equipped to "predict, strategies, prevent, and learn" from the different disaster phases. It is, therefore, imperative that LIS curricula prepare faculties and other information professionals to be able to plan for various disasters and provide information or social services, or even a refuge for emergency responders and the displaced, during and after the disasters. It is also advised that future studies should explore collaboration opportunities between disaster management (DM) studies and Library and Information Science (LIS) curriculum. To develop opportunities, we should seek support from universities and professional organisations.

CONCLUSION

It has been unanimously agreed that "a stitch in time save nine" means having knowledge from the initial level on the subject (disaster management) helps professionals to organise their library activates and operations keeping in mind the disaster issues. It was also observed that the library and information science curricula need to be modified, keeping in mind the implications of disaster could affect the library and one has to be ready to face and mitigate the situation. However, based on this study's finding, it appears that preparing librarians/professionals on how to meet and respond to disasters within their community receives only indirect coverage in LIS curricula; in many cases, it is also given low priority. Further, the idea is of this study was to increase awareness among the policy makers, designing a curriculum that is relevant in the present times, it would be prudent to analyse the trends in LIS disaster preparedness activities. Due to the nature of libraries in the community and what they represent, we find it very relevant to the study of disaster management to include disaster preparedness planning in the curricula system. In many cases, the two concepts are used interchangeably to reflect the managing of a community emergency. Calling it a disaster or a crisis conveys the meaning of the community emergency under the study.

REFERENCES

- 1. Adinku, S. (2003). Disaster management and the need for Institutional Commitment at the University of Ghana. *Ghana Library Journal*, 15, 15-35.
- 2. Alazmi, B.M. & Qallaf, C.L. (2008). Crisis-management content in LIS curricula: developing a model for future improvement. *Journal of Library Administration*, 58(7), 645-673.
- 3. Al-Qallaf, C. L., & Mika, J. J. (2013). The role of multiculturalism and diversity in library and information science: LIS education and the job market. *Libri*, 63(1), 1–20.
- 4. Bishoff, L. (2004). The collaboration imperative. *Library Journal*, 129(1), 34-35.
- 5. Blankson-Hemans, L. and Hibberd, B.J. (1994). An assessment of LIS curricula and the field of practice in the commercial sector. *New Library World*, 105(1202/1203), 269-280.
- 6. Braquet, D. M. (2009). Information needs in a Hurricane Gustav evacuation shelter: Reflections on a librarian's volunteer experience. *The Southeastern Librarian*, 57(3), 16–28.
- 7. Bronstein, J. (2007). Current trends in library and information studies curricula around the world: Looking for the user-centred approach. Journal of Information, *Communication and Ethics in Society*, 5(2/3), 59–78.

- 8. Bunce, S., Partridge, H., & Davis, K. (2012). Exploring information experience using social media during the 2011 Queensland floods: A pilot study. *The Australian Library Journal*, 61(1), 34–45.
- 9. Department of Library and Information Science, Aligarh Muslim University. (2020). Retrieved October 20, 2020 from https://www.amu.ac.in/departmentpage.jsp?did=80.
- Department of Library and Information Science, Aligarh Muslim University. (2020). Retrieved December 20, 2020 from https:// www.jmi.ac.in/zhlibrary.
- 11. Department of Library and Information Science, Babasaheb Bhimrao Ambedkar University. (2020). Retrieved September 15, 2020 from http://www.bbau.ac.in/new/dept/dlis.
- 12. Department of Library and Information Science, Banaras Hindu University. (2020). Retrieved October 13, 2020 from http://www.bhu.ac.in/arts/lis
- 13. Department of Library and Information Science, Indira Gandhi National Open University. (2020). Retrieved October 15, 2020 from http://www.ignou.ac.in/ignou/studentzone.
- 14. Department of Library and Information Science, University of Delhi. (2020). Retrieved September 13, 2020 from https://www.http://dlis.du.ac.in/#.
- 15. Eden, P. & Matthews, G. (1996). Disaster management in libraries. *Library Management*, 17(3), 5-12. https://

- search.proquest.com/docview/198867277? accountid=10461.
- 16. Hossain, A. (2013). Community participation in disaster management: Role of social work to enhance participation. *Antrocon Online Journal of Anthropology*, 9 (1), 159-171.
- 17. Ingrassia, P. L., Foletti, M., Djalali, A., Scarone, P., Ragazzoni, L., Della Corte, F., & Friedl, T. (2014). Education and training initiatives for crisis management in the European Union: A web-based analysis of available programs. *Prehospital and Disaster Medicine*, 29 (02), 115–126.
- 18. Jin, T and Bouthillier, F. (2012). The Integration of Intelligence Analysis into LIS Education. *Journal of Education for Library and Information Science*, 53 (2), 130-148.
- 19. Karisiddappa, C.R. et...al. (2004). Literacy concepts in the LIS curriculum. World Library and Information Congress: 70th IFLA General Conference and Council 22-27 August 2004 Buenos Aires, Argentina: http://www.ifla.org/IV/ifla70 /prog04.htm.
- 20. Kash, T. J., & Darling, J. R. (1998). Crisis management: Prevention, diagnosis and intervention. *Leadership & Organization Development Journal*, 19(4), 179–186.
- 21. Kaur, T. (2009). Disaster planning in university libraries in India: A neglected area. *New Library World*, 110(3), 175-187. http://dx.doi.org/10.1108/03074800910941365
- 22. Kim, J. (2012). Building rapport between LIS and museum studies, *Journal of Education* for Library and Information Science, 3. 149-161.

- 23. Lalonde, C., & Roux-Dufort, C. (2013). Challenges in teaching crisis management: Connecting theories, skills, and reflexivity. *Journal of Management Education*, 37(1), 21–50.
- 24. Marty, P. F. & Twidale, M. B. (2011). Museum informatics across the curriculum: Ten years of preparing LIS students for careers transcend libraries, archives, and museums. *Journal of Education for Library and Information Science*, 52 (1), 9-22.
- 25. Mei, L.Z.P. (2007). The basic concepts and contents of crisis management of libraries. Retrieved December 20, 2020 from http://en.cnki.com.cn /Article_en/CJFDTOTAL-BOOK200702008.htm
- 26. Merchant, R. M., Elmer, S., & Lurie, N. (2011). Integrating social media into emergency-preparedness efforts. *New England Journal of Medicine*, 365(4), 289–291.
- 27. Morgan, G. & Smith, J.G. (1997). Disaster management in libraries: the role of a disaster plan. *South African Journal of Libraries and Information Science*, 65(1). Retrieved August 17, 2020 from http://sajlis.journals.ac.za/pub/article/view/ 1502/1400.
- 28. O'Connor, S., Smith, I., & Afzal, W. (2017). Disruption be my guide: A study into future directions for academic programs for information management. *Library Hi Tech*, 35(1), 71–80.
- 29. Pearson, C., & Clair, J. (1998) Reframing crisis management. *Academy of Management Review*, 23(1), 59–76.

- 30. Rehman, A.U. (2014). Importance and measures of disaster management in libraries. *European Scientific Journal*, 1(1), 319-329.
- 31. Saunders, L. (2015). Education for instruction: A review of LIS instruction syllabi. *The Reference Librarian*, 56(1), 1–21.
- 32. Simola, S. (2014). Teaching corporate crisis management through business ethics education. *European Journal of Training and Development*, 38(5), 483–503.
- 33. Tenopir, C. (2000). I never learned about that in library school: *Curriculum Changes in LIS*, 24 (2), 42-46.
- 34. The International Federation of Red Cross and Red Crescent Societies (IFRC). (2020). Retrieved December 20, 2020 from https://www.ifrc.org/PageFiles/40699/dm-diagram-b.gif.
- 35. The role of Physical therapists in disaster management. (2016). Retrieved December 25, 2020 from https://www.ifrc.org/PageFiles/40699/dm-diagram-b.gif.
- 36. Tibbo, H., & Duff, W. (2008). To ward a digital curation curriculum for museum studies: A North American perspective. Paper presented at 2008 Annual Conference of CI DOC, Athens, Greece. Retrieved from http://digitalcurationexchange.org/sites/default/files/drfile2008-06-18.4718982366.pdf

