Contribution of Library Professionals and Libraries in Open Educational Resources in Indian Scenario

Sunil Kumar Upneja

Gopichand Arya Mahila College, Abohar - 152116, India
E-mail: sunil.upneja@gmail.com

ABSTRACT

Open Educational Resources (OER) are teaching and learning content that live in public domain and are free to use or reuse. The present study examines the contribution of Library Professionals and Libraries in dealing with OERs in India. A self-designed structured questionnaire was circulated online through blogs, discussion forums, social media groups and personal e-mails among library professionals, faculty and students for random data collection. The findings of the present study reveal that though majority (93 %) of library professionals are aware of the concept of OER but they are unable to guide the OER movement because their parent institution (70 %) have no policy guidelines on design and development of OERs. Library professionals play multiple tasks in dealing with OERs, most prominent being promotion (15.63 %) and Identification (14.02 %) of OERs. The study further reveals that 25.48 per cent library professionals believe that through use of OERs the patrons get benefit of gaining access to high quality learning material. While 21.3 per cent library professionals feels that lack of awareness on the existence of OERs because of rapid technological advancement is the major challenge faced by them. The study recommends that there is an urgent need to sensitise institutions about the benefits of OER.

Keywords: Open educational resources, OERs, Librarians' role.

1. INTRODUCTION

Open Educational Resources (OER) are freely accessible online teaching and learning content that users can retain, reuse, revise, remix or redistribute[1]. OERs are released under creative common licenses. It is important to distinguish the OER from Open Access (OA) material. Though OER and OA are closely related but the basic difference lies in the purpose with which they are created. OERs are mainly created for the purpose of teaching-learning where as OA material is mostly research manuscripts released online free of charge.[2] The last decade has witnessed a gaining movement in production and usage of OER all over the globe. The potentials of OER to bridge gap between formal and informal knowledge transmission have been very well recognised by the government and other non government agencies from time to time.

In the last one decade, India also has been encountering the steady development of OER, where various national foundations such as The National Knowledge Commission (NKC)[3] of India, University Grants Commissions (UGC), All India Council of Technical Education (AICTE), National Association of Software and Services Companies (NASSCOM)[4-5], Government of India (GOI) through its National Mission on Education through Information and Communication Technology (NMEICT), National Programme on Technology Enhanced Learning (NPTEL), Open Source Courseware Animation Repository (OSCAR), Consortium for Educational Content (CEC) etc. have set up OER gateways for giving across the countrywide access to their intellectual assets.

India is turning into a dynamic player in OER. In this OER movement, the resourceful library professionals, who always remain abreast and stay open to the varying patterns in the educational world, who are well-informed of accessible resources both in print and on the web, and who also gain expertise with evolving technologies, turn into a crucial partner in the collaborative educational efforts of both teacher and student[6]. The phenomena of OER in India are presently in a preliminary phase of development yet the prospective growth of the OER marvel cannot be denied here and more such initiatives should be motivated in the lifelong and distance education system in India[7]. Many studies in the recent past have been conducted which discuss the general issues on OER but not the contribution of libraries and library fraternity[8,9,10]. Therefore the present study was conducted to examine the contribution of library professionals and libraries in OER movement in India. The significance of the present study is that data is collected from primary source i.e. library fraternity and analysed related to OER in India. The previous studies conducted are theoretical reviews, opinions or reporting of OERs only.

2. LITERATURE REVIEW

In the creation, organisation and promotion of OER, libraries and librarians are labeled as important players in the

---

process of development, selection, integration and promotion of OER. The published literature discussing the role of library professionals and libraries in dealing with OER is still limited though several studies conducted in the past in different parts of the world have been reviewed to have more insight on the aspect. Anderson, T., et al.[11] while contextualizing OER within Ranganathan's Five Laws, gives libraries the framework to examine their role in OER and can demonstrate their commitment to making education accessible to all students. In a further study conducted by Mwinyimbegu, C. M.[12] in Tanzania shows that librarians know about the possibilities of OER and also assumes manifold roles in promoting the use and understanding of OER. Librarians facilitate hosting of OERs in university websites to encourage their accessibility and utilisation. Woodward, K. M.[13] argued that in order to promote the usage of OER, Libraries and librarians are positioned to champion the OER adoption movement given their pervasive scope and specialised skills. Librarians' knowledge of free online publishing, copyright issues and fairuse, can also add to the discussion about open educational resources. Brenda Smith and Leva Lee[14] are of the view that academic librarians are obviously suited to help explore the OER world and to tackle few of these difficulties by directing, supporting, and cooperating in OER initiatives with OER users and writers. Highlighting the importance of Librarians' role in OER, Bruce Massis[15] stated that Librarians are in an exclusive role to offer help to teachers trying to fuse OER into their lessons. According to Erin Davis et al.[16] Librarians with a background of assembling top quality learning materials for both teaching and research, are well placed to work with teachers trying to fuse OER into their instructions. According to another study conducted in India by Upadhyay, N. and Upadhyay, S. R.[17] Libraries are proposed to collect digital educational resources, consisting of both institutionally housed and remotely accessed resources. In this way, OER take up a significant and vital position. The study conducted by Bueno-de-la-Fuente et al.[18] indicates that the support of the library is still not broad, and a significant lack of awareness prevails with regards to library activities about the resources released by OER initiatives. The investigative study by Robertson[19] revealed that librarians can offer guidance to organisations, scholastic staff and researchers since they are occupied in OER through metadata management, resource description, information management, knowledge dissemination, information and digital literacy, subject guides for finding resources, administering intellectual property rights and promoting suitable open licensing.

3. OBJECTIVES OF THE STUDY

The primary goal of this study is to survey the role and level of participation of the Library professional and Libraries, in Open Educational Resources initiatives. However specific objectives are as follows.

- To assess the level of awareness of Library professionals relating to OER
- To know the usefulness of Indian OER initiative by Library Professionals
- To recognise those jobs and processes in OER initiatives in which Library Professionals are vigorously involved

Table 1. Characteristics of the respondents

Gender	No. of participants	Percentage
Male	131	70
Female	56	30
Total	187	100
Designation		
Librarian / Deputy Librarian / Asst. Librarian	124	66
Library Science Faculty / Scholars / Scientists	15	8
Technical / Professional Assistants	30	16
Library Trainees / Students	18	10
Total	187	100

Table 2. Statewise list of respondents

State / Union Tertiary	No. of Participants
Andhra Pradesh	10
Arunachal Pradesh	1
Assam	7
Bihar	7
Chandigarh	4
Chhattisgarh	3
Dadra and Nagar Haveli	2
Delhi	19
Goa	1
Gujarat	6
Haryana	5
Himachal Pradesh	1
Jammu and Kashmir	2
Karnataka	11
Kerala	5
Madhya Pradesh	6
Maharashtra	17
Manipur	2
Nagaland	1
Odisha	2
Punjab	7
Puduchery	2
Rajasthan	9
Tamil Nadu	12
Telangana	3
Uttar Pradesh	26
Uttarakhand	4
West Bengal	8
Total	183

- To investigate techniques used by Library Professionals and libraries in creating OER awareness

• To determine benefits and challenges perceived by Library Professionals in dealing with OER in India.

4. RESEARCH METHODOLOGY

The blended techniques have been used, incorporating both qualitative and quantitative feature for the purpose of this study, including the design, execution, and analysis of a survey related to OER initiatives in India. Secondary data obtained from documentary sources such as journal articles, survey reports, blog articles were reviewed to for descriptive analysis and primary data was collected through questionnaire for quantitative analysis.

The selection of target population was deliberately left open to any library professional who is dealing with OER initiatives in India. Data was collected through self-designed structured questionnaire having open and close ended questions. The survey questionnaire designed with google forms was widely circulated through blogs, social media groups and through e-mail requests. The google form was kept alive for responses during the month of September-October 2019. A total 190 responses were received throughout India. On receipt of the responses the data was exported to an excel sheet for the purpose of easy analysis. Tables, charts and graphs relating to individual questions were designed using excel sheet.

5. RESULTS AND DISCUSSIONS

5.1 Characteristics of the Respondents

The population of this study was the library professionals, faculty, trainees, scholars and students working in Indian Libraries of various types academic, public or special. The participants belonged to various states and UT of the India.

Table 1 show that in order to record views and circumvent biasness, both sexes were involved. Out of the 187 respondents 131 (70 %) were males and 56 (30 %) were female. The population also involved various types of Designation as Table 1 show that 124 (66 %) respondents are Librarian / Deputy Librarian / Asst. Librarian, 15 (8 %) are Library Science Faculty / Scholars / Scientists, 30 (16 %) are Technical / Professional Assistants and 18 (10 %) are Library Trainee / Students out of the total 187 participant population. Table 2 enlists various Indian states and Union territories with number of respondents 183 as 4 respondents did not mention their city / state to which they belong. This shows that the study received responses from almost all parts of the country. Library professionals with various specialised skills, sex and educational credentials were involved to ensure that all aspects related to OER are well recorded. The result indicated that respondents have sufficient aptitude and involvement with taking care of array of information formats that fulfill information needs of patrons. This incorporates OER which becomes part of library holdings.

5.2 Librarians' Level of Awareness on OER

To assess their level of awareness on the concept of OER, respondents were requested to specify if they are aware of the phrase "Open Educational Resources". Data in Fig. 1, show that 99 (53 %) of respondents said they are aware of the term open educational resources, 55 (30 %) said they are highly
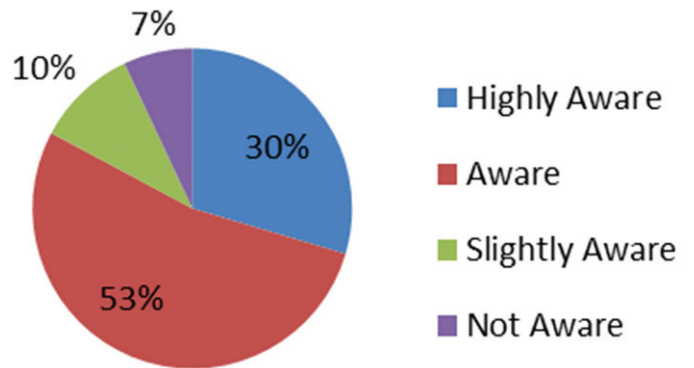

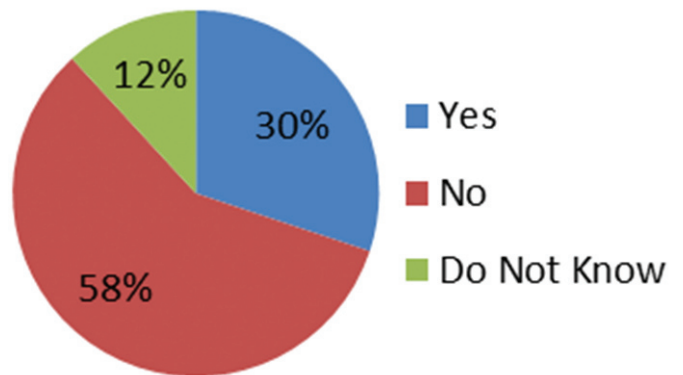**Figure 1. Librarians' level of awareness on OER.**

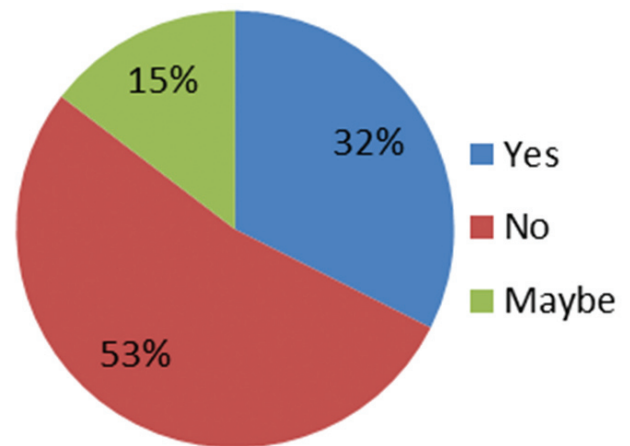**Figure 2. Institutional policy document on OER.**

Figure 3. Institutional hosting OER.

aware, 19 (10 %) said slightly aware and 13 (7 %) said they are not aware of OER. These findings point out that a greater part of librarian community is aware of the term OER. This is an extremely hopeful trend as library professionals who are guardian of information are very much aware of OER inspite the fact that it is a novel idea in the domain of library and information science especially in a developing country like India. In spite this encouraging pattern; there is great need to acquaint information professionals especially to the 7 percent who said they are not aware and 10 percent who said are slightly aware of OER and its prospective benefits. A similar kind of

study was also conducted by Katz[20] in United States and the results were almost in line with the present study which states approximately half of the respondents regularly use some kind of OER in their teaching and other half have heard of the term OER.

5.3 Institutional Hosting, Usage and Policy on OER

The respondents were asked if their parent institute has a policy document on OER. Out of the total 186 responses received, 56 (30 %) said their institute has a policy document on OER, 108 (58 %) said their institute has no policy document on OER and 22 (12 %) said they do not know about the policy document. The Other related question asked was about the hosting of OER by the parent institute. Out of the total 185 responses received, 60 (32 %) said their institute host OER, 98 (53 %) said their institute do not host OER and 27 (15 %) were not sure about the hosting of OER by parent institution.

The results from the Fig. 2 and Fig. 3 depicts that about 70 per cent institutes neither have policy document on OER nor they host OER on institutional website. Therefore, it indicates that there is an urgent need to sensitise institutions about the role of OER in teaching and learning and its potential benefits. The findings of the current study is again almost in support of the study conducted in University of London by Hotzipanagos and Gregson[21] which states that 54 per cent respondent libraries had no policy related to open access resources subscription.

Table 3. Usage of Indian OER initiative

Name of the OER initiative N = 181	Frequency of responses (705)*	Percentage
ePathshala	99	14.04
NROER	37	5.25
A-VIEW	6	0.85
e-Gyankosh	96	13.62
FlexiLearn	18	2.55
NIOS-OER	25	3.55
NPTEL	82	11.63
OER4S	7	0.99
OSCAR	10	1.42
CEC	19	2.70
FOSSE	17	2.41
Spoken-Tutorial	27	3.83
Virtual Labs	28	3.97
National Digital Library of India	124	17.59
Swayam	110	15.60

*multiple answers were permitted

Another question as which Indian OER initiative they mostly use or suits their information requirements. The results of Table 3 shows that the most popular Indian OER initiative

Table 4. Librarians' role in OER

Librarians' Role N = 172	Frequency of responses* (742)	Percentage
Identification	104	14.02
Production	53	7.14
Integration	43	5.80
Dissemination	82	11.05
Management	93	12.53
Guiding Patrons	98	13.21
Collection	96	12.94
Promotion	116	15.63
Evaluation	57	7.68

*multiple answers were permitted

among library professionals is National Digital Library of India (NDLI) that received highest usage frequency 124 (17.59 %), Study Webs of Active–Learning for Young Aspiring Minds (SWAYAM) received 110 (15.60 %) second most popular OER initiative and ePathshala received 99 (14.04 %) the third most popular OER initiative. The total respondents to this question were 181 and total frequency of responses was 705. It is noteworthy to mention here that according to a webometric analysis conducted by Saha and Mukhopadhyay[22], SAKSHAT portal is the most popular Indian OER among students, teachers and guardians and other stakeholders. But SAKSHAT portal is a bouquet of number of OER Indian initiatives which are dealt individually in this study.

5.4 Librarian's Contribution in OER

Respondents were asked to mention their role being librarian in OER. The total number of respondents to this question was 172 and frequency of responses was 742. The results from Table 4 reveal that Library professionals have manifold roles to play in OER including promotion 116 (15.63 %), identification 104 (14.02 %), guiding users 98 (13.21 %), collection 96 12.96 %), management 93 (12.53 %), dissemination 82 (11.05 %), evaluation 57 (7.68 %), Production 53 (7.14 %) and integration 43 (5.80 %).

The results also justify the findings of Robertson[19] who insisted that librarians must also have significance in promoting open resources, guiding patrons in describing, discovering, managing and using OER. The findings also reveal that the Librarians prefer to identify and promote the use of OER rather than involving themselves in production and integration. This signifies the emerging roles of librarians in the new information age.

5.5 Techniques Adopted by Library Fraternity in Promoting OER Awareness

There are number of ways which are used by library professionals in promoting the use of OER among its patrons. In this question respondents were asked to mention the technique they use to create awareness about OER among

Table 5. Techniques adopted by library professionals in promoting OER awareness

Technique adopted by Librarians N = 174	Frequency of Responses* (754)	Percentage
Conduct Seminars / Workshops	82	10.88
Provide Training in Library	100	13.26
During Library Orientation Programme	109	14.46
Using Social Media	83	11.01
Institutional Website	70	9.28
Library Website	87	11.54
Separate OER Portal	34	4.51
Learning Management Software (Moodle)	38	5.04
Posters, Brochures, Pamphlets etc.	52	6.90
Current Awareness Services	99	13.13

*multiple answers were permitted

Table 6. Libraries' contribution in OER initiatives

Library's role (N = 154)	Frequency of responses (367)*	Percentage
Creates OER	34	9.26
Hosts OER on Library Website	51	13.90
Hosts OER on Institutional Website	36	9.81
Integrate OER in Institutional Repositories	49	13.35
Integrate OER metadata in Library catalogue	38	10.35
Included the OER in the e-resources collection	58	15.80
Hosts a independent OER portal	27	7.36
Supports Institution in OER initiatives	74	20.16

*multiple answers were permitted

patrons. The total number of respondents to this question was 174 and frequency of responses was 754.

Results shown in Table 5 reveals that 109 (14.46 %) respondents used Library Orientation, 100 (13.26 %) provide Training in Library, 99 (13.13 %) during current awareness services, 87 (11.54 %) Library Website, 83 (11.01 %) using Social Media, 82 (10.88 %) conducts seminars/workshops, 70 (9.28 %) Institutional Website, 52 (6.90 %) Posters, Brochures, Pamphlets etc., 38 (5.04 %) Learning Management Software and 34 (4.51 %) use separate OER Portal for creating OER awareness. An analysis of the Table 5 indicates that Librarians

prefer to introduce OER among patrons during Orientation programs and also provide specific training in library to utilise OERs. Benny[23] in a study conducted in Mumbai University asserts that library orientation method is widely used to train the users and training is required even though the users are techno-savvy since the use of electronic resources including OER varies from person to person.

5.6 Libraries' Contribution in OER

Respondents were asked to describe the areas where Libraries as an institute can contribute in OER initiatives. Total respondents to this question were 154 while the total frequency of responses was 367. Table 6 shows that 74 (20.16 %) libraries support Institution in OER initiatives, 58 (15.80 %) libraries include OER in their e-resource collection, 51 (13.90 %) libraries host OER on Library Website, 49 (13.35 %) libraries integrate OER in Institutional Repositories, 38 (10.35 %) libraries integrate OER metadata in Library Catalogue, 36 (9.81 %) libraries hosts OER on Institutional Website, 34 (9.26 %) libraries create OER and 27 (7.36 %) libraries host an Independent OER Portal. The results from data reveals that Libraries as an organisation prefer to support parent institution in OER initiatives instead of creating and hosting OER portals. Roberston[19] also suggested the possible point of contact between libraries and OER initiative by their parent institutions including (a) metadata and resource description (b) information management (c) digital or information literacy (d) subject based guides and (e) managing Intellectual Property Rights.

Table 7. Benefits of OER initiatives

Perspective Benefits of OER N = 172	Frequency of Responses* (518)	Percentage
Bring down costs for students	96	18.53
Gaining access to best resources	132	25.48
Outreach to disadvantaged communities	68	13.13
Supplement other learning materials	109	21.04
Flexible and lifelong learning	113	21.81

*multiple answers were permitted

5.7 Benefits of OER in Librarians' Perspective

Respondents were asked to mention the perspective benefits they seek from OER initiative in providing quality education to masses. Total respondents to this question were 172 while the total frequency of responses was 518. Table 7 shows that among the 518 responses 132 (25.48 %) gaining access to best resources, 113 (21.81 %) flexible and lifelong, 109 (21.04 %) supplement other learning materials, 96 (18.53 %) bring down costs for students, 68 (13.13 %) outreach to disadvantaged communities. Similarly, Krelja[24] considered that OER will reduce the divide between different strata of society, enhance the quality of education, speed up the knowledge flow

and boost the strength of people involved in the educational process.

5.8 Challenges of OER in Librarians' Perspective

In this question the respondents were asked to point out the challenges they face while dealing with OER. Total respondents to this question were 166 while the total frequency of responses was 427. Table 8 shows that 91 (21.31 %) said lack of awareness on the existence OER, 77 (18.03 %) said lack of technical skills, 75 (17.56), 69 (16.16 %) said lack of bandwidth / hardware / software, 60 (14.05 %) said lack of interest in pedagogical change, 55 (12.88 %) said lack of support from management are the major challenges faced by the library fraternity. Padhi[10] in a similar kind of study tabulated the factors responsible for not using OER in Indian higher education. According to the study respondents opined many challenges with regards to usage of OER including awareness, training, infrastructure, policy, attitude, management, copyright and plagiarism issues. The survey results asserts a similar kind of challenge to the present study i.e. lack of awareness and skill on how OER can be used.

Table 8. Challenges of OER in Librarians' perspective

Challenges of OER N = 166	Frequency of Responses* (427)	Percentage
Lack of technical skills	77	18.03
Lack of awareness on their existence	91	21.31
Lack of bandwidth / hardware / software	69	16.16
Lack of policy guidelines for their use	75	17.56
Lack of support from management	55	12.88
Lack of interest in pedagogical change	60	14.05

*multiple answers were permitted

6. LIMITATIONS

There are two major limitations concerned with this study. Firstly the survey responses were the personal willingness of the respondents which may lead to self-selection. Secondly less number of responses presents challenges of completely understanding the landscape of OER. Though, the study doesn't provide for the results that can be generalised but hopefully can help to give direction to future research and discussion about OER initiative. Another difficulty faced during data collection was less rate of response. Repeated requests were given to the respondents to fill up the questionnaire.

7. CONCLUSIONS

The findings of the study reveals that though majority of library professionals are aware about the concept of OER but still they are unable to guide the OER movement due to lack of institutional policy about OER. They are not able to fully utilise the fruit of OER. Library Professionals have manifold role to play in OER including identification, promotion, managing and guiding patrons whereas Libraries as an institute supports its parent organisation in OER initiatives. In order to promote the use of OERs Librarians prefer introduce OER to patrons during Orientation programme and also provide specific training to them. The National Digital Library of India (NDLI) is the most favoured OER of the Indian Library fraternity. In accordance with the librarians' perspective the main benefits of OER is that one gains access to the best resources available online. The major challenges faced by librarians in dealing with OER include lack of awareness on existence of OER because of the speed in which they are generated. Based on the findings of the study it is recommended that there is a need to sensitise various institutions involved in teaching, learning and research about the benefits of OER. There is an urgent need on part of such institutions to frame policy and guidelines relating to OER. Library professionals should take lead role in promoting OERs by organizing workshops, seminars, training sessions etc. Effort should be made to integrate OERs in institutional repositories. The importance of Libraries and Librarians in OER cannot be overlooked.

REFERENCES

1. Wiley, D. The access compromise and the 5th R. Iterating toward openness, 2014. http://opencontent.org/blog/archives/3221. (accessed on 05 November 2019).
2. Eaton, S.E. Understanding the difference between open access (OA) and open educational resource (OER). https://drsaraheaton.wordpress.com/2017/04/03/understanding-the-difference-between-open-access-oa-and-open-educational-resource-oer. (accessed on 06 November 2019).
3. National knowledge commission. Report of the working group on open access and open educational resources. Government of India New Delhi, India, 2007.
4. Das, A.K. Open access to knowledge and information: Scholarly literature and digital library initiatives – The South Asian Scenario. UNESCO, New Delhi, 2008.
5. Ghosh, S.B. & Das, A.K. Open access and institutional repositories: A developing country perspective – A case study of India. *IFLA Journal*, 2007, **33**(3), 229-50. doi: 10.1177/0340035207083304.
6. Goswami, Saikat. Role of libraries and LIS professionals on open educational resources in modern information era. *Int. J. Digital Libr. Serv.*, 2011, **1**(1), 79-90.
7. Thomas, Raysh. Use of open educational resources: Indian Scenario. *Int. J. Libr. Inf. Sci.*, 2017, **6** (5), 17–26.
8. Bansal, T.; Chabra, S.Q. & Joshi, D. Current initiatives and challenges to OERs in Indian higher education. *Asian J. Distance Educ.*, 2013, **11**(1), 4–18.
9. Das, A.K. Emergence of open educational resources (OER) in India and its impact on lifelong learning. *Libr. Hi. Tech. News,* 2011, **28**(5), 10–15.
10. Padhi, N. Acceptance and usability of OER in India: An investigation using UTAUT Model. *Open Praxis,* 2018, **10**(1), 55-65. doi: 10.5944/openpraxis.10.1.623.
11. Anderson, T. *et al.* The five laws of OER: Observations

from Ranganathan. *J. Libr. Scholarly Commun.,* 2019, 7 (General Issue), eP2299.
doi: 10.7710/2162-3309.2299.

12. Mwinyimbegu, C.M. The role of libraries and librarians in open educational resources in Tanzania: The case of selected public university libraries. *Libr. Philos. Pract.*, 2018. https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=5467&context=libphilprac. (accessed on 05 October 2019)

13. Woodward, K.M. Building a path to college success: Advocacy, discovery and OER adoption in emerging educational models. *J. Libr. Inf. Serv. Distance Learn.*, 2017, **11**(1-2), 206-212.
doi: 10.1080/1533290X.2016.1232053.

14. Brenda, Smith & Leva, Lee. Librarians and OER: Cultivating a community of practice to be more effective advocates. *J. Libr. Inf. Serv. Distance Learn.*, 2016, **11**(1-2), 106-122.
doi: 10.1080/1533290X.2016.1226592.

15. Bruce, Massis. Libraries and OER, *New Libr. World*, 2016, **117**(11/12), 768:771.
doi: 10.1108/NLW-09-2016-0064.

16. Davis, Erin.; Cochran, Dory.; Fagerheim, Britt. & Thoms, Becky. Enhancing teaching and learning: Libraries and open educational resources in the classroom. *Public Serv. Q.*, 2016, **12**(1), 22-35.
doi: 10.1080/15228959.2015.1108893.

17. Upadhyay, N. & Upadhyay, S.R. The role of academic libraries in Open Educational Resources (OER) Initiatives. *Library Waves*, 2015, **1**(1), 28-32.

18. Bueno-de-la-Fuente. G.; Robertson, R.J. & Boon, S. The roles of libraries and information professionals in Open Educational Resources (OER) initiatives. 2012. https://minds.wisconsin.edu/bitstream/ handle/1793/63306/OER-Libraries-Survey-Report.pdf?sequence=1&isAllowed=y. (accessed on 04 November 2019).

19. Roberston, R.J. What do academic libraries have to do with open educational resources? Theme: Long term sustainability of open education projects. In *Open Ed 2010 Proceedings*. Barcelona:UOC, OU, BYU. November 2010, 2-4.

20. Katz, S. The case for open educational resources in library and information science education. *LIS Scholarship Arch.,* 2019.
doi: 10.31229/osf.io/ervct.

21. Hatzipanagos, S. & Gregson, J. The role of open access and open educational resources: A distance learning perspective. *The Electron. J. e-Learning,* 2015, **13**(2), 97-105. www.ejel.org (accessed on 6 November 2019)

22. Saha, A. & Mukhopadhyay, P. Ranking OER providers in India: A webometric analysis. *Int. Res.: J. Libr. Inf. Sci.*, 2016, **6** (1), 134-143.

23. Benny, L. Selection and acquisition of e-resources in academic libraries. *Int. J. Digital Libr. Serv.*, 2015, **5**(2), 124-137.

24. Krelja, K.E. Advantages and limitations of usage of open educational resources in small countries. *Int. J. Res. in Educ. Sci.*, 2016, **2**(1), 136-142.

CONTRIBUTOR

Sunil Kumar Upneja is working as Librarian in Gopichand Arya Mahila College, Abohar Punjab. He has done M.L.I.Sc. from Kurukshetra University and PGDLAN from IGNOU, New Delhi. He has more than 10 years of experience in Librarianship. His area of interest is Information Technology application to Libraries, Open Access and Open Educational Practices. He has three papers publication and one textbook to his credit. He has independently conducted this survey.