

ONLINE INFORMATION SEEKING AND DISSEMINATION BY THE FACULTY : A STUDY OF GURU NANAK DEV UNIVERSITY

Dr. Jatinder Singh Gill* Dr. Satwinderpal Kaur Gill (Corresponding Author)**

* **Assistant Librarian,**
Bhai Gurdas Library, Guru Nanak
Dev University. Amritsar,
Punjab. India

****Assistant Professor,**
Department of Library and
Information Science, Guru Nanak
Dev University,
Amritsar. Punjab. India.

QR Code



Abstract: - *The present study investigates the impact of the COVID-19 lockdown on online information seeking and dissemination among the faculty of Guru Nanak Dev University. The study was conducted to find out the online information seeking and dissemination activities of faculty. The major purpose of seeking online information was teaching. E-journals were the most preferred source of information during lockdown. Search engines were the preferred platform for online search. Accessibility was a strong factor affecting the way of information seeking during lockdown. The WhatsApp group was the preferred platform for disseminating information. A majority of respondents prepared their notes and shared them with students preferably in Pdf format. Laptops and mobile phones were largely used devices for conducting online classes and poor Internet connectivity/slow network was a major hurdle in conducting online classes. Most of the respondents found online teaching/learning as a support to students in learning during the pandemic as well as an opportunity to explore various platforms helpful in online teaching. Online conferences/webinars/workshops were the preferred medium of professional communication. This study helps to understand how university faculty could make their teaching possible when the entire world came to a halt. The research paper is based on primary data collected by the researchers; hence it is original research.*

Keywords: Online information seeking, Online information dissemination, Online teaching, Education, GNDU.

INTRODUCTION

Abundant literature has already been published throwing light on Covid -19 pandemic. The present study focuses only on the impact of the Covid-19 lockdown on information seeking and dissemination activities of teaching faculty. All enterprises witnessed a complete shutdown

worldwide. Like all trades, the education field was not an exception. Educational institutes including schools, colleges, and universities as well as private coaching centres were closed as a safeguard for protecting students and faculties from the spread of the virus. The Ministry of Human Resources Development, Govt. of India

(MHRD) suggested higher education institutions to teach online for students' interest. The problem was unanticipated. It caught the world unprepared (Saeed et al., 2021). Hence, it was not possible to provide formal training to teachers in the use of ICT in teaching. Everyone made use of ICT according to their prior knowledge and as per the availability of devices with them. People made use of smartphones, tablets, laptops, and other devices available to them (Jogezai et al., 2021). Open Access content helped like a boon to cope with the situation. Many libraries provided free access to their content during the COVID-19 lockdown. Online repositories and digital libraries played a significant role to cater to the needs of the academic community. Some commercial educational databases also came up with free offerings during the lockdown period. UGC and MHRD have taken many initiatives for enhancing the quality of online teaching. INFLIBNET centre did a remarkable job by executing projects of MHRD and UGC. Different platforms being run under INFLIBNET for delivery of e-content including E-ShodhSindhu, N-List, E-PG pathshala, Shodhganga, Vidya-Mitra, Vidwan, etc helped a lot in online content delivery. UGC-MOOCs and Swayam Prabha are playing an important role in reshaping the scenario of online teaching learning (www.inflibnet.ac.in). Educational institutes started online modes of teaching and online examination. Undoubtedly, the digital divide affected the aforementioned efforts to deliver quality education to the students

at global level. Hence, the study also covers problems faced by faculty in seeking as well as dissemination of information.

REVIEW OF LITERATURE

Armstrong-Mensah et.al (2020) conducted a study on the effect of COVID-19 and distance learning on public health students at Georgia State University and found that 100% of students used laptops/chrome books and 47.3% used Smartphones. 86.6% of students had Internet access through broadband. 64.55% of the students felt that online transitioning increased their academic workload. Some strategies to improve online teaching as suggested by Bao (2020) were that one should always have plans B and C for emergency preparedness of online classes. Breakup the entire teaching content into small units may increase the learning effectiveness of students. In online mode, the voice of the teacher can be a key component. Less techno-savvy teachers may get assistance from teaching assistants in using online platforms. The students who skip online classes may be encouraged to strengthen outside learning. For students' offline self-learning and online teaching/learning, healthy discussions may be performed. Jena (2020) studied the impact of Covid-19 on higher education in India and highlighted various aspects which affected the education field in terms of destabilisation of academic activities, affected laboratory work in research institutes, educational assessment system, and even reduced employment opportunities. On the other hand, the study also

focuses on digital initiatives of UGC and MHRD for higher education like e-Gyankosh, Gyandarshan, Swayam, National Digital Library of India, Shodhganga, VIDWAN, etc. Lack of proper training for the use of Information technology and lack of equipment at home were the major difficulties faced by the teachers. Decreased level of physical activity among children has been reported in the study. In the context of higher education, Mishra, Gupta, and Shree (2020) found that 100% of teachers, as well as students, were using YouTube/Facebook streaming for online teaching/learning. Both the categories (100%) also used e-mail. 50% of the teachers watched YouTube videos. 87% of the teachers used telephonic conversation. Only 11% of teachers and 27% of students watched Swayam Prabha educational DTH channels/Zonet Cable TV. Nambiar (2020) explored the impact of online learning during COVID-19 and found that 53% of teachers disagreed that online classes are more effective than classroom mode. A majority of the teachers (76.3%) felt a lack of teacher-student interaction in online mode. 71.1% of teachers felt that it was difficult to take classes for longer duration in online mode. 90.8% of teachers felt the effect of technical issues in the free flow of lectures. On the other side, 54.9% of the students felt that online mode is more effective than classroom mode. 60.4% of the students felt that there is a lack of interaction in online mode. 70.6% of students expressed that online classes are less structured than offline classes. Ishtiaq,

Sehar, and Shahid (2020) in their study on information dissemination by the university libraries of Sindh Pakistan during COVID-19 found that 58.7% of universities provided services to users. Among these services, the most frequently used service was e-mail (55.6%). 27.6% of libraries gave quick responses to users' queries. 62.1% of libraries conducted user awareness programmes. Facebook was the most used media platform (53.6%) and 40.6% of the library staff were using Google Plus. Another study by Korcz et. al (2021) on the opinion of Physical education teachers in different countries during COVID-19 found a positive evaluation of the online mode of teaching from Poland, Croatia, Turkey, and Bulgaria; and a negative evaluation from Kosovo and Macedonia, whereas a Neutral evaluation in Turkey. Perez-Calderon, Prieto-Ballester, and Miguel-Barrado (2021) examined digital competence among pre-University teachers and found that the majority of the teachers (mean 5.71) store their data on the cloud. A large number of respondents (mean 4.80) use digital devices. Respondents displayed great use (mean 5.18) and great knowledge of internet surfing (mean 5.40). A majority of the respondents (mean 5.60) were able to create powerpoint presentations. Most of the respondents have knowledge of and use online communication tools like messaging and video calls with mean of 5.80 and mean of 5.56 respectively.

RESEARCH OBJECTIVES

- To know the impact of the COVID-19 lockdown on information seeking behaviour of the respondents.
- To know the impact of the COVID-19 lockdown on information dissemination by the respondents.
- To explore how the respondents adopted the new normal for teaching in online mode.
- To know about different online platforms and modes of dissemination used by the respondents.
- To explore various difficulties faced by the respondents in online teaching.

METHODOLOGY

The nature of the study is exploratory. Since the present study was conducted during the lockdown period, data was collected using a self-constructed questionnaire in Google form. Google form was shared with faculty through e-mail as well as WhatsApp with a clear statement about the confidentiality and academic use of the collected data. Email and WhatsApp contacts of faculty were collected from the university website. 95 faculty members participated in the survey. There was not any requirement of ethical approval for data collection as it was based on voluntary participation and was to be used only for research purpose. Data collected has been analysed using MS Excel and presented through tables and graphs. Analysis of data has been divided into two parts A) Online information seeking and B) Dissemination of information.

DISTRIBUTION OF RESPONDENTS

Table 1: Distribution of respondents

	Number of Respondents	Percentage
Designation wise		
Professor	15	15.79
Associate professor	14	14.74
Assistant Professor	66	69.47
Gender wise		
Male	45	47.37
Female	50	52.63
Experience wise (In Years)		
1-5	32	33.68
6-10	22	23.16
11-15	9	9.47
16-20	6	6.32
21-25	11	11.58
More than 26	15	15.79
Total	95	100

Table 1 shows the distribution of respondents. It shows that out of 95 respondents, a majority of respondents (69.47%) are assistant professors followed by 15.79% professors and 14.74% associate professors. A majority of respondents (33.68%) are having 1 to 5 years of experience followed by 23.16% having 6 to 10 years of experience and 15.79% having more than 26 years of experience. The gender-wise breakup of respondents shows that 52.63% of respondents are female and 47.37% are male.

DATA ANALYSIS

Part A: Online Information Seeking

Purpose of Seeking Information

Table 2: Purpose of Seeking Information

Purpose	No. of Responses	%
Teaching	83	87.37%
Research	64	67.37%
Updating subject knowledge	56	58.95%
General Awareness	46	48.42%

Table 2 depicts the analysis of the purpose for which respondents sought information during lockdown. The major purpose of seeking information was teaching with 83.37% responses followed by research (67.37%), updating subject knowledge (58.95%), and general awareness (48.42%).

Time spent for seeking information

Table 3: Time spent for seeking information

Time duration	No. of responses	Percentage (%)
1 hour	12	12.63%
2 hours	26	27.37%
3 hours	32	33.68%
4 hours	9	9.47%
5 hours	1	1.05%
More than 5 hours	14	14.74%

Table 3 shows the time spent by respondents for gathering information during lockdown. 33.68% of respondents spent 3 hours followed by 2 hours

with 27.37% responses. 14.74% of respondents used to spend more than 5 hours.

Preferred Resources of Information

Table 4: Preferred resources for seeking information

Sources	No. of responses	Percentage	Ranking
Printed books	47	49.47%	5
e-books	67	70.53%	2
Printed journals	32	33.68%	6
e-journals	71	74.74%	1
Reference documents	29	30.52%	7
Online databases	64	67.37%	3
Subject gateways	12	12.63%	9
Attend online conference	57	60%	4
Academic blogs/discussion	27	28.42%	8

Table 4 shows the preference for information sources given by respondents during the covid-19 lockdown. E-journals were the most preferred source of information (74.74%) followed by e-books (70.53%), online databases (67.37%), online conferences (60%), and printed books (49.47%).

Platform used for online search to get academic material

Table 5: Platform used for online search

Online platform	No. of Responses	Percentage	Ranking
Search engines	67	70.53%	1
Websites of Research organisations/associations in your subject fields	56	58.95%	2
Swayam	43	45.26%	3
Shodhganga	38	40%	4
National Digital Library of India	36	37.89%	5
Access to digital information resources provided by Bhai Gurdas Library (GNDU)	30	31.58%	6
Commercial databases providing free access during lockdown	27	28.42%	7
E-pg pathshala	26	27.37%	8

Table 5 shows online platforms where respondents searched for information during the Covid-19 lockdown. It shows that search engines were the most preferred sources of information with 70.53% of responses followed by websites of research organizations/associations in respective subject fields (58.95%). Respondents also searched the Swayam platform (45.26%), Sodhganga (40%), and National digital library of India with 37.89% responses.

Preferred format to retrieve Information

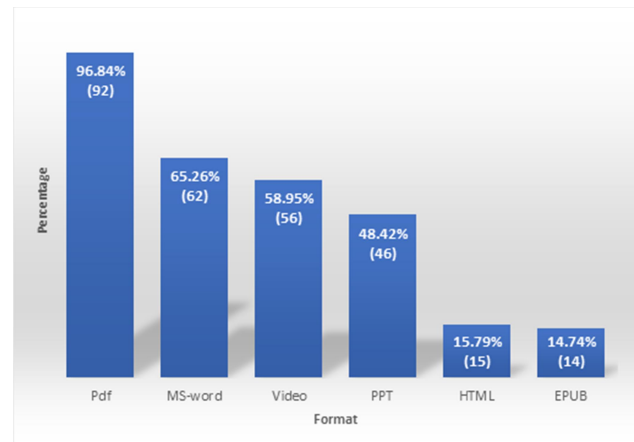


Figure 1: Preferred format for retrieval

The most preferred format for retrieving information by faculty (Figure 1) is PDF with 96.84% of responses. Other preferred formats are MS-word (65.26%), Video (58.95%), and PPT (48.42%).

Factors affecting information seeking during lockdown

Table 6: Factors affecting information seeking during lockdown

Factors	No. of Responses	Percentage (%)
Accessibility	59	64.11%
Reliability	56	58.95%
Familiarity with the source	51	53.68%
Relevance	49	51.58%
Accuracy	45	47.37%
Quality	42	44.21%
Timeliness	27	28.42%
Cost	16	16.84%

Table 6 provides an analysis of various factors which affected the information seeking behaviour of respondents during the Covid-19 lockdown. It depicts that in lockdown, accessibility was a strong factor with 64.11% of responses followed by reliability (58.95%), familiarity with the source (53.68%), and relevance (51.58%). Accuracy and quality were also considered by faculty with 47.37% and 44.21% responses respectively. The cost comes as the least affecting factor on information seeking by respondents.

Part B: Dissemination of Information

Platform used for conducting online classes

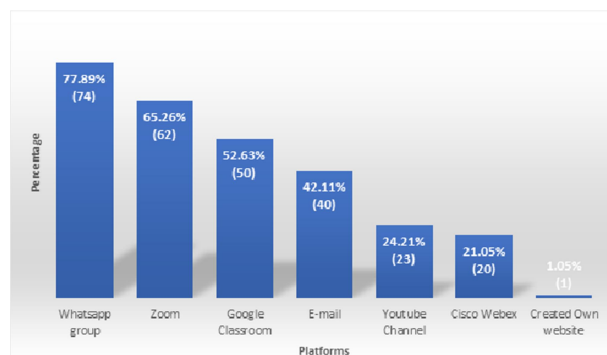


Figure 2: Platform used for online classes

Figure 2 provides an overview of different platforms used by respondents for taking online classes. The observation depicts that WhatsApp group was a highly used platform (77.89%) followed by Zoom (65.26%). Nearly half of the respondents (52.63%) made use of Google Classroom. E-mail was also utilised by 42.11% of respondents. YouTube Channel and Cisco Webex got 24.21% and 21.05% responses respectively. Website creation was not popular and got only a single response. It is observed that Skype and Microsoft Teams were also used but only with a

minor percentage i.e., 2.1% and 1.1% respectively.

Modes of sharing content with students

Table 7: Modes of sharing content with students

Mode of Sharing	No. of Responses	Percentage
Prepare own notes and share them with students	89	93.68%
Share content downloaded from the Internet (anywhere available)	58	61.05%
Share scanned pages from printed books/other documents	43	45.26%
Share links to content over the Internet (anywhere available)	42	44.21%
Share downloaded content only from creative commons sources	32	33.68%
Share links to content only from creative commons sources	21	22.11%

Sharing content was a challenge during the lockdown. Different modes were used by respondents for sharing content with their students (Table 7). Data analysis shows that 93.68% of respondents used to prepare their own notes and

shared them with their students. 61.05% of respondents shared content downloaded from the Internet. 45.26% of respondents shared scanned pages from printed books and other documents followed by 44.21% of respondents, who shared links to contents over the Internet. Content from creative commons sources was downloaded and shared by 33.68% of respondents followed by only links to contents from creative commons sources were shared (22.11%).

Preferred format for sharing content with students

Table 8: Preferred format for sharing content

Preferred Format	No. of Responses	Percentage
PDF file	82	86.32%
Video lecture	72	75.79%
MS word file	47	49.47%
Scanned image	46	48.42%
Audio recording of your lecture	28	29.47%

Table 8 shows that PDF file was the most preferred (86.32%) format for sharing content with students followed by video lecture (75.79%). MS Word files and scanned images were preferred by 49.47% and 48.42% of respondents respectively.

Devices used for conducting online classes

Table 9: Devices used for online classes

Devices	No. of Responses	Percentage
Laptop	74	77.89%
Mobile phone	71	74.74%
Desktop	14	14.74%
Tablet	12	12.63%

Different IT devices helped faculty in conducting online classes. (Table 9). A majority of respondents (77.89%) used laptops followed by mobile phones (74.74%). Desktop and tablet were used by 14.74% and 12.63% of respondents respectively.

Difficulties generally faced in conducting online classes

Table 10: Difficulties faced in conducting online classes

Difficulties	No. of responses	Percentage
Poor Internet Connectivity/Slow network	66	69.47%
Low attendance of students in the classes	43	48.26%
Digital divide	29	30.53%
Difficulty in scheduling classes from home	20	22.05%
Lack of IT knowledge	10	10.53%

Data analysis (Table 10) depicts that poor Internet connectivity/slow network was a major difficulty in conducting online classes (69.47%) followed by low attendance of students in the classes (48.26%), digital divide (30.53%), difficulty in scheduling classes from home (22.05%) and lack of IT knowledge (10.53%).

Opinion of respondents regarding online teaching/learning during lockdown

Table 11: Opinion regarding online teaching/learning

Opinion	No. of responses	Percentage
Support students in learning during the pandemic	78	82.11%
Opportunity to explore various platforms helpful in online teaching	68	71.58%
Requirement for completing the syllabus	42	44.21%
Just for the sake of performing the teacher’s duty	10	10.53%

Table 11 presents an analysis of the opinion of respondents about online teaching/learning and depicts that 82.11% of respondents were of the view that online teaching/learning support students in learning during the pandemic. 71.58%

found it as an opportunity to explore various platforms helpful in online teaching. 44.21% of respondents found online teaching as a requirement for completing the syllabus.

Level of Satisfaction with the Usefulness of online teaching

Table 12: Level of satisfaction with the usefulness of online teaching

Level of Satisfaction	No. of responses	Percentage
Extremely Useful	18	18.95%
Moderately Useful	53	55.79%
Somewhat Useful	21	22.11%
Slightly Useful	3	3.16%
Not at all useful	-	-

Table 12 explores the level of satisfaction of respondents with the usefulness of online teaching. 55.79% of respondents found it moderately useful followed by ‘somewhat useful’ (22.11%), extremely useful (18.95%), and slightly useful’ (3.16%).

The medium used for online professional communication

Table 13: Medium used for online professional communication

Medium	No. of responses	Percentage
Attending online conferences/webinars/workshops	69	72.63%
Social Networking sites	39	41.05%
Discussion forums	35	36.84%
Participation as a resource person in online conferences/webinars/workshops	30	31.58%

Table 13 shows different mediums used by respondents for online professional communication. A majority of respondents attended online conferences/webinars/workshops (72.63%) followed by social networking sites (41.05%), and discussion forums (36.84%). 31.58% of respondents participated as resource persons in online conferences/webinars/workshops.

Research work Undertaken during the lockdown

Table 14: Research work undertaken during the lockdown

Response (Yes/No)	No. of responses	Percentage
Yes	63	66.32%
No	32	33.68%

Table 14 shows that 63.32% of respondents undertook research work during the lockdown.

Online conference/webinar/workshop organisation

Table 15: Online conference/webinar/workshop organisation

Response	No. of responses	Percentage
Yes	26	27.7%
No	68	72.3%

Table 15 shows that 27.7% of respondents had organised online conferences/webinars or workshops.

FINDINGS OF THE STUDY

The major findings of the present study are as follows:

- The major purpose of seeking online information was teaching.
- A majority of the respondents spend 3 hours for seeking information.
- E-journals were the most preferred source of information.

- Search engines were the most preferred sources of information seeking.
- The PDF file was the most preferred format for sharing content with students.
- A majority of respondents used laptops followed by mobile phones.
- The poor Internet connectivity/slow network was a major difficulty in conducting online classes.
- Most of the respondents were of the view that online teaching/learning support students in learning during the pandemic.
- Attending online conference/webinars/workshops were a major medium of professional communication.

CONCLUSION

Like other trades, the education field was no exception during the pandemic. Despite having tough challenges, the academic community tried its best to perform its job in terms of delivering online lectures, checking online assignments, and conducting online examinations. The academic fraternity of the higher education system explored new insights into information communication technology. Teachers imbibed new IT skills, which are going to be an asset in their lifelong careers. They also pursued their research work in all possible ways. They conducted webinars, and other online ventures as well as register their online presence to attend these programmes.

REFERENCES

1. Saeed, A. et. al. (2021). Analysing the features affecting the performance of teachers during Covid-19: A multilevel feature selection. *Electronics*, 10, 1673. Retrieved from: <http://doi.org/10.3390/electronics10141673>
2. Jomezai, N. A. et al. (2021). Teachers' attitude towards social media (SM) use in online learning amid the COVID-19 pandemic: the effects of SM use by teachers and religious scholars during physical distancing. *Heliyon*, 7, e06781. Retrieved from <http://www.cell.com/heliyon>
3. www.inflibnet.ac.in
4. Armstrong-Mensah, E et al. (2020). COVID-19 and distance Learning: Effects on Georgia State University School of public health students. *Frontiers in Public Health*, 8, 576227. doi: 10.3389/fpubh.2020.576227
5. Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Human Behavior & Emerging Technology*, 2, 113–115. Retrieved from <https://publons.com/publon/10.1002/hbe2.191>.
6. Jena, P. K. (2020). Impact of Covid-19 on higher education in India. *International Journal of Advanced Education and Research*, 5(3), 77-81.
7. Mishra, L., Gupta, T., & Shree, A. (2020) Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational*

Research Open. Retrieved from
<https://doi.org/10.1016/j.ijedro.2020.100012>

8. Nambiar, D. (2020). The impact of online learning during COVID-19: Students' and teachers' perspective. *International Journal of Indian Psychology*, 8(2), 783-793. DOI:10.25215/0802.094
9. Ishtiaq, S., Sehar, N., & Shahid, A. (2020). Information dissemination during Covid-19 and lockdown: The Role of University libraries of Sindh, Pakistan. *Library Philosophy and Practice (e-journal)*. 4280. Retrieved from <https://digitalcommons.unl.edu/libphilprac/4280>
10. Korcz, A. et al. (2021). Physical education teachers' opinion about online teaching during the COVID-19 Pandemic: Comparative study of European countries. *Sustainability*, 13(21), 11730. Retrieved from <https://doi.org/10.3390/su132111730>
11. Pérez-Calderón, E., Prieto-Ballester, J., & Miguel-Barrado, V. (2021). Analysis of digital competence for Spanish teachers at Pre-University educational key stages during COVID-19. *International Journal of Environmental Research and Public Health*, 18, 8093. Retrieved from: <https://doi.org/10.3390/ijerph18158093>