

COVID-19 and digital library services – a case study of a university’s library

COVID-19 and
digital library
services

Dipti Mehta

Department of Reference Services, Bridgewater State University, Bridgewater, Massachusetts, USA, and

Xiaocan Wang

Department of Digital Library Services, Bridgewater State University, Bridgewater, Massachusetts, USA and Lucy Home, Bridgewater, Massachusetts, USA

Received 2 May 2020
Revised 19 May 2020
Accepted 19 May 2020

Abstract

Purpose – The purpose of this paper is to share the experience of a university library in response to the COVID-19 pandemic since early March 2020. The paper describes the library’s position during the crisis and illustrates the uncharted challenges that the pandemic has posed to its digital services. Furthermore, it details how the library has adapted some existing services into a digital format and explored new initiatives/practices to support the university’s full online teaching and learning since March 23, 2020.

Design/methodology/approach – This paper describes the library’s various digital services that are used to meet the needs of its end-users during the COVID-19 pandemic. The approaches used are the authors’ personal experiences working at an academic library, observations of the library’s responses with regards to its digital services, as well as their reflections on what can be considered for development now and in the future. It highlights the current initiatives and best practices for digital library services during a public health crisis.

Findings – This paper aims to make other university libraries aware of what the library has implemented with providing digital services to its teaching faculty and students during the pandemic. It also describes the challenges and implications for the library professionals working in-house and remotely.

Originality/value – This paper is of great value in providing insights and practical solutions responding to the global health crisis for other libraries that are coping with the similar challenges for digital library services.

Keywords University library, Academic library, Coronavirus, covid-19, Digital library services, Pandemic and library services

Paper type Case study

Introduction

Bridgewater State University (BSU) was one of the first state normal schools in America intended specifically for the training of more public-school teachers (Boyden, 1993). The university has transformed from its first home, a single room in the basement of Bridgewater’s Town Hall in the 1840s to an outstanding comprehensive college of liberal



The authors sincerely thank all the staff of Maxwell Library at BSU for their input, insights, innovative ideas and experience during the global pandemic, COVID-19.

arts and professional programs. It is the 10th largest four-year college/university in Massachusetts (Rondileau, 1991). According to the Institutional Research statistics for Fall 2018–2019, almost 12,000 full and part-time undergraduate and graduate students were enrolled at BSU with a full-time faculty number of 357 (Office of Institutional Research, Bridgewater State University, 2019). More than 100 undergraduate and 35 graduate programs are offered by the university's six colleges and one school. The 272-acre campus is home to 43 academic, administrative and residential buildings. The university is known for its extensive information technology and distance education resources. It is also a regional center for the enhancement of teaching through technology for PreK-12 teachers and university faculty.

The university library, Clement C. Maxwell Library opened in 1971 as the college's newest building (Fiore and Wilson, 1976). The library's renovation project in 2007 has integrated such facilities as the library instruction room, the video and podcast recording studio, group study rooms, and faculty offices for its Learning Commons on all three library floors. Each floor of the library is approximately 40,000 square offering plenty of space for seating and collections. The library offers access to over 205 electronic databases in various disciplines for the BSU faculty, students and staff.

Maxwell Library provides many services and resources that can be used off-campus. The goal of the distance learning library services is to provide library resources and services to students who are currently registered in distance learning courses on two of BSU's satellite campuses, Attleboro and Cape Cod but not on the Bridgewater campus. Off-campus services of the library include agreements that allow current BSU faculty and students with borrowing privileges, reference services, access to periodicals, and photocopying services at participating libraries such as Massachusetts State Community College Libraries, which are part of the Southeastern Massachusetts Library System (SEMLS) consortium.

On March 16, 2020, the governor of Massachusetts announced a stay-at-home order for all non-essential employees in higher education (Massachusetts Department of Higher Education, 2020). On March 22, 2020, the Governor issued an emergency order extending the closure of all public and private schools. The Department of Higher Education and Public Health strongly recommended that colleges and universities, both private and public, reduce the need for students to be on campus, suspend in-person classes and implement a shift to online learning. After the above measures were in place, the BSU President announced that students were no longer coming back after spring break as both in-person and online classes were canceled for the week of March 16 (Office of the President, 2020). Due to social distancing and stay-at-home orders, colleges and universities were asked to prepare for remote learning as early as March 23, 2020. To slow down the COVID-19 pandemic, many colleges and universities have been asked to shut down and make immediate transitions of moving education to online learning in a matter of weeks. This has posed a challenge for libraries, for users including teaching faculty and students, as well as the services the library has been providing during the pre-pandemic period.

Challenges

Considering the outbreak of COVID-19 and following Massachusetts Governor's guidelines, BSU implemented the short-term telecommuting plan as an appropriate option for employees during the current public health crisis on March 15, 2020 [1].

According to Ithaka S + R which is monitoring actions that academic libraries are taking in the USA due to the coronavirus through a real-time survey (Peet, 2020), business as usual is no longer the case for academic libraries in the USA. Among the few buildings open during this special period, Maxwell Library was declared to be one of the first buildings as

essential on campus and open to faculty, staff and employees only, effective March 23, 2020 [2]. During this global pandemic, the library is also one of the few academic libraries in Massachusetts that remains open. The library is open from Monday through Friday from 8:00 a.m. to 4:00 p.m. and closed on Saturdays and Sundays. A limited number of library staff still go to work onsite and provide limited services to only certain types of patrons, while non-essential staff are working from home.

The library has been in a unique position to operate as an essential building since the middle of March. For instance, the library is open with hours different from its normal schedule; the library building is accessible with only one door open, while all the other three entrances locked; the first floor of the library is allowed for access but not the rest of the two floors; the library is open to BSU faculty, students and staff but not to community users; a majority of library staff work from home except for the library director and approximately four additional staff working in-house; group study rooms are currently not in use; the primary services provided at the library include circulation and the use of computers and printers that reside on the first floor, while many other services have been shifted to fully online intervention. These changes present a set of unique challenges in practice for library staff working both onsite and remotely.

Challenges for library staff working in-house

On the BSU campus, students with financial difficulties and nearly 86 international students are currently residing in separate dorms and some students are living off-campus in houses near the campus (Michonski, 2020). They have been able to use the computers and printers, check out books and course reserves, and study at the library to complete their coursework. Some library staff that were identified and willing to work as essential have been working in the library to date. They maintain social distancing and take extra measures such as wearing masks and gloves to protect hygiene for their self-care, for the library collections, and the users, in addition to quarantining items they handle. These in-house hygiene practices are new to those working onsite and create anxiety of being infected with the coronavirus.

Challenges for library staff working at-home

As librarians under the union contract of Massachusetts State College Association are considered non-essential staff, they were asked to work remotely as of March 16, 2020 along with other library staff identified non-essential. However, this decision to telecommute was not a favorable decision for some library staff due to multiple reasons.

Telecommuting is a sudden decision for the library staff who are not prepared for the drastic change. Working at home requires a computer available for use. However, everyone having a PC computer at home is a misconception. Even worse, some library staff had to wait before loaning a computer from the library or the IT department. Another challenge is that some staff do not have the internet or high-speed connection at home. They had to either subscribe to an internet service out of their own pocket, purchase a modem/router from a store, or pick up a hotspot device from the IT department when it was available. Not to mention that the internet connection and Wi-Fi may be limited in use at the home front with some family members sharing the same internet at the same time. For a supervisor, it is hard to deploy job responsibilities to his/her subordinate who does not have a computer or internet access from home. Employees not equipped with technologies at home present challenges that have never existed before, as working remotely has become the new norm now and perhaps in the future for so many across the country.

Without training and preparedness beforehand, some library staff do not know how to access Microsoft outlook off-campus, the documents saved and specific software installed on their office computers, the shared network drives, etc. Additionally, the campus IT support cannot be provided in a timely manner because the support team has been overwhelmed with many employees starting to telecommute around the same time. In the process of learning to do their work at home, some library staff have experienced frustration due to various problems: not being able to send out and receive emails from outlook; not familiar with CLOUD PC 2.0 that is used to virtually connect to their Windows 10 computer residing at their offices; etc. All these challenges and obstacles affect a library staff's ability to efficiently and productively perform his/her jobs. Few staff even have the fear of not receiving a paycheck in hand due to the affected ability of not performing their job as they normally do.

The limitation of working at home increases the difficulty of effectively fulfilling job responsibilities. Similarly, library colleagues not being able to collaborate, support, social network, and meet with each other contribute to their negative emotional feelings such as isolation, anxiety, uncertainty and stress. Some more challenges are not having a private working space at home, dealing with children studying at home and juggling between being a parent and an employee.

All these challenges directly or indirectly affect the ability of library staff to explore the right tools and provide digital library services efficiently, confidently and comfortably during the pandemic period.

Challenges for digital library services and users

While adapting to online teaching and learning, BSU faculty and students have raised questions regarding the library services they have been using. The most common questions are where to return the check-out items including computers and how to renew items that have passed due dates. Gradually, user questions go toward how to loan a computer for study and where to find research articles. At this point, the library services available to most BSU faculty and students are digital services only. This indicates that accessing and using library services can only be realized in a virtual form as opposed to face-to-face.

In the digital world, all types of libraries have been developing a wide variety of digital services to meet the needs of patrons from diverse backgrounds. More and more library services have been developed not requiring patrons physically present at a library facility. At Maxwell Library, there is a set of digital services that have been used to support the teaching, learning and research needs of BSU faculty and students. Some of the digital services do not need the library staff's intervention while some do. These services can be broadly categorized into reference services, bibliographic instructions (BI), e-resource access and use and multiple digital initiatives (e.g. BSU institutional repository).

Like many academic libraries, engaging faculty and students with digital library services has been a challenge. With the outbreak of COVID-19, the level of the challenges posted to digital libraries and users are going up higher because of the following reasons the library has experienced:

- As faculty and students are overwhelmed by adapting to online teaching and learning, it becomes even harder to be reached. The only way to market digital library services demands a virtual format, because the connection between the library and its users becomes very limited and face-to-face promotion is nearly impossible due to shelter-in-place and relevant guidelines.

- All the course reserves that are in high demand are not in an electronic format. Some of the course reserves need to be scanned before they are delivered to students via email. This was not a challenge in the past. A similar issue occurs with requested e-resources via an interlibrary loan as fewer libraries are fulfilling the requests.
- Reference services and BI must be conducted online as opposed to in-person assistance which was the main method of communication. Because the librarians are not well prepared for the sudden change, the need for using multiple venues may require the use of proper applications and a certain amount of training in advance.
- When physical resources become unavailable or the availability is limited, the need for accessing and using e-resources may become higher. Nevertheless, not all the students are familiar with using multiple library search platforms to find the resources in need. Accessing e-resources off-campus only can increase the challenge because this requires that they should be configured properly beforehand.
- The digitization and temperature-controlled processes for the library's digital initiatives have been suspended. The pause of the behind-the-scenes work for digital initiatives affect the library to deliver more digital resources including full-text content to users.
- Collaboration with academic departments and administrative units on joint projects for digital initiatives can face challenges. The past process and procedure for collaborative projects may no longer work with all the changes unexpectedly taking place.

Experiences and observations on the digital library services

The pandemic has brought a revolution not only in the online teaching of higher education but also in the effective ways academic libraries can deliver their services virtually. To address the immediate needs arising from the pandemic for library services, all the librarians brainstormed on how to inform users of the changed library services in a timely fashion.

The library announced the changes through the big yellow alert box on the top of the library's home page [3]. This was quickly followed by launching the Coronavirus and Library Services web page ([Maxwell Library, Bridgewater State University, 2020](#)) which has been frequently updated by all the librarians. At the same time, the library has been actively promoting changes to library services through social media, email and online public announcement platforms that are available for both students and faculty.

The global pandemic has posed challenges for digital library services and the library staff. The following section will discuss the library's responses used to manage some of the challenges. This section is broken down by the type of digital library services.

Reference services

There is no doubt that undergraduate students need assistance from the library in regards to selecting and evaluating sources and ethically using information which is one of the primary modes to conduct research ([Riehman-Murphy and Hunter, 2019](#)). However, during the pandemic, the reference desk is no longer available, though the library is open. On the other hand, according to a real-time survey created by Ithaka S + R, "46.44% of respondents report library reference services are now limited to online or by phone, and 48.34% report that access to print materials has been discontinued" ([Mahnaz, 2020](#)). This is in part true for Maxwell Library, where most of its reference and research consultation questions are

DLP

managed through LibChat over the Springshare platform. Research consultations in the past have usually been conducted in-person rather than virtually.

The library's online reference services include research consultations, LibChat and LibAnswers (i.e. email, SMS, IM and FAQ) that have been impacted since librarians were asked to telecommute. From February 1 to March 15, 2020 before the COVID-19 pandemic, reference services were mostly used in-person rather than virtually as shown in [Figure 1](#). Very few reference questions were asked virtually when the library was fully functional with all library employees working onsite.

From March 16, 2020 onward, as reference staff members started working remotely, it was imperative that a schedule should be created to answer reference questions virtually. Among the three reference librarians and a library assistant, each one took a slot of 2 h between 8:00 a.m. and 4:00 p.m., signing on to LibChat and answering questions.

Due to the pandemic, there is a shift to students and faculty using the library virtual reference services more than before. From March 16 to April 30, 2020 as shown in [Figure 2](#), the reference transactions answered by email are 89, 16 by SMS and 21 by IM. Comparing the one and a half months before and after March 15, 2020, there is a clear trend that the use of virtual reference services has climbed up.

With the up taking needs of online reference services, it is significant to promote these reference services virtually as much as possible. One initiative implemented was to create a virtual postcard for students as shown in [Figure 3](#). The postcard was shortly shared on the library's Facebook and Twitter and delivered to all the students.

Other measures that have been taken include creating more virtual displays every month and raising awareness of the library's virtual services and e-resources. In April, the library has designed virtual displays, such as Hope Month, National Poetry and National Library Week. As from the above statistics, it is safe to say that the pandemic has created more awareness and use of the library's reference virtual services.

Bibliographic instructions

As much as the library's virtual reference services have increased, this has not been the case with BI after March 16, 2020. In March 2019, there were 25 BI sessions held in-person; in

Figure 1.
Types of methods
used to answer
reference questions
from 2/01/2020–3/15/
2020

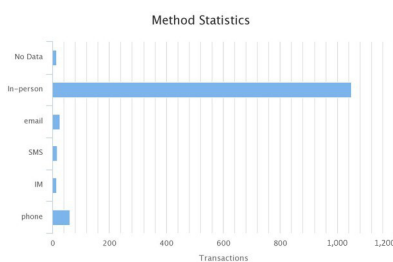
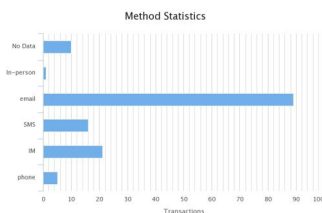


Figure 2.
Types of methods
used to answer
reference questions
from 3/16/2020–4/30/
2020



COVID-19 and digital library services

March 2020, there is a drop in the number of BI sessions with 6 sessions held as shown in Figure 4.

One quick response was to change the Classroom Instruction Form by adding the link to the Information Literacy online guide, which librarians work in unison to update it. Reference librarians who were assigned to teach BI classes have worked individually with faculty to accommodate their requests for their particular library instruction sessions. Approximately four BI sessions were conducted through Zoom and an online guide for a Communication Studies course was created and integrated into the BSU's Learning Management System, Blackboard. To follow through requests made by faculty, reference librarians developed online research guides and also created video tutorials for certain electronic databases using a video application namely Screen-o-Matic as needed. Because both faculty and students have been overwhelmed with the challenges for online teaching and learning, it is understandable that the BI sessions are not on the priority list for faculty. Reference librarians continue to market and deliver BI sessions through Microsoft Teams, Zoom or Blackboard Collaborate, as stay-at-home guidelines extend.

Providing electronic resources (e-resources)

Access and use of subscribed e-resources. Electronic resources are a considerable portion of the library collections that the library has spent a significant part of its budget on the subscription. The primary e-resources are in the form of proprietary databases, journals, e-books, and streaming videos, and films in addition to some open resources. They are readily available to end-users over the web through multiple search platforms provided by the library. The pandemic creates a good chance to promote e-resources to library users, especially to undergraduate students that tend to use Google to satisfy all their course study



Figure 3. Virtual postcard for students

	Reference Services		Library Instruction Session	
	Sessions	Participants	Sessions	Participants
July 2018	2	32		
August 2018	0	0		
September 2018	52	1119		
October 2018	38	785		
November 2018	24	473		
December 2018	1	20		
January 2019	8	118		
February 2019	38	664		
March 2019	25	459		
April 2019	14	260		
May 2019	0	0		
June 2019	0	0		
Total	202	3940		
			Reference Services	
			Sessions	Participants
July 2019			3	45
August 2019			1	8
September 2019			38	706
October 2019			50	1102
November 2019			15	323
December 2019			0	0
January 2020			14	227
February 2020				
March 2020			6	77
April 2020				
May 2020				
June 2020				
Total			127	2490

Figure 4. Library instruction session FY2019-2020 vs FY2020-2021

DLP

and research needs. In the meantime, the pandemic poses the challenge for the library because essentially the only way to use these e-resources is from accessing off-campus. Even though e-resources are meant to be accessed anywhere and anytime, many users used these e-resources when they were on campus before this dire time. This challenge indicates the increased need for the library to guarantee that the e-resources can be used regardless of where the users are.

In response to COVID-19, the library proactively took steps to create a web page addressing the need for remotely accessing e-resources. This page aims to alleviate the frustration of not being able to use the e-resources off-campus. Although creating such a page is not specific to the pandemic, the library needed to provide more detailed information along with troubleshooting tips for the majority of faculty and students who suddenly became remote users only.

Considering that patrons find e-resources using Google Scholar, the library revisited the topic of delivering its subscribed e-resources through the search engine. One response of the library was to create a simple instruction sheet that was posted on the Coronavirus and Library Services web page. This instruction shares with users on how to configure the Google Scholar setting in their computers before performing a search. This serves as a useful way for BSU users to directly discover the library's e-resources in Google Scholar. Besides, the library investigated again whether Google Scholar listed on the A-Z Databases as shown in [Figure 5](#) and the Google Scholar widgets embedded in various online research guides as in [Figure 6](#) can direct users to discover library subscribed resources without configuring their browser settings. It turns out that all widgets work as intended; but Google Scholar as one of the databases was not set up in a proper way, which was shortly reconfigured.

Making e-resources available for off-campus access takes a series of work between the library, the BSU IT department and outside providers/vendors. To address the availability of e-resources off-campus, the best practice is to thoroughly check the remote accessibility and resolve issues as needed. This process is time-consuming and requires collaboration between internal and external parties on an ongoing basis.

Course reserves. Due to the high expense of textbooks, the library's course reserves program is one of the popular digital services for students. Before the pandemic, students

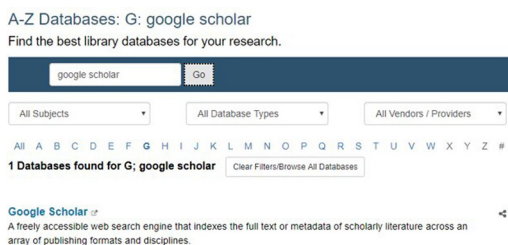


Figure 5.
Google scholar listed
on the A-Z databases

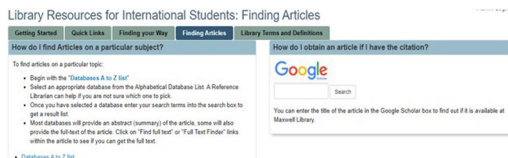


Figure 6.
Google scholar
widget embedded on
an online research
guide

could check out a textbook put on reserve by a faculty at the Circulation Desk for a 2-h loan period. For some courses, the library may have multiple copies of the book on reserve.

Due to the pandemic, if the student cannot return the course reserve on time, the library has temporarily bent the rules and allowed the student to keep the course reserve for the rest of the semester. Additionally, one initiative the library has temporarily implemented is to scan chapters of a course reserve book and loan it as a PDF attachment to students enrolled in the classes. Although the library has never used this practice before, this is one solution to meet the needs of students. If the library has more cases like this, it will consider revisiting its circulation policies and make necessary changes.

Free e-Textbooks and open educational resources materials. Textbook affordability is a challenge for students. In the full online teaching and learning environment, students' access to textbooks is not only critical for students learning at home, but also for faculty who want to make them available as part of their curriculum. Besides adopting the practice of loaning course reserves, the library is proactively making free digital content including e-Textbooks available to students more than ever. In addition, many commercial digital content providers/vendors have made proprietary digital content freely available for public or university audiences for a limited period.

Taking advantage of all the free offers that are not possible otherwise, all the librarians at the library worked together to compile a list of free e-resources to faculty and students. Some of the e-resources are academic-orientated in the form of e-Textbooks. Examples are VitalSource e-Textbooks, Pearson's digital materials, Cambridge Textbook Collection and ScienceDirect. In addition to making these e-textbooks available to the library's COVID-19 webpage, the library has sent the free e-Textbooks information along with the access points to the group email lists for faculty and students. The library has also created a question, "How can I find free e-Textbooks online?" as one of the frequently asked questions on the library home page as shown in [Figure 7](#). This answer is the second most often visited FAQ entry for April 2020 as shown in [Figure 8](#).

Another practice the library is doing is to promote open educational resources (OER) materials. To some extent, the pandemic stresses the need for open scholarly communication. This creates the opportunity for the library to provide the e-Textbooks that is cost-prohibitive. In conjunction with accessing and using e-resources, the library has started the initiative to embed e-resources such as databases, e-books, and online research guides into Blackboard. The initiative that is implementing involves using the Learning Tools Interoperability to integrate the resources from the third parties that the library has a subscription into Blackboard. Therefore, faculty and students can directly access the library's resources and services into the courses students are taking, not shifting from outside of Blackboard. The library has become more active bringing what it can offer to where their patrons must go and visit frequently. This will no doubt be an important way to reach faculty and students who are working remotely during the pandemic period.

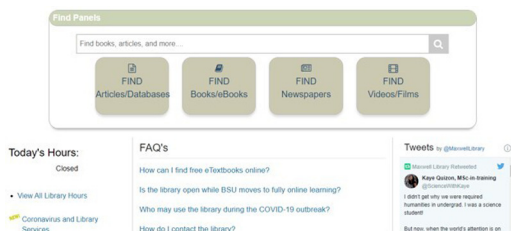


Figure 7.
FAQ, "How can I find
free eTextbooks
online?"

Question	Created ↓	Views
How can I find free eTextbooks online?	Apr 10 20, 09:46	81 (monthly)
How do I contact the library?	Mar 30 20, 16:12	24 (monthly)
Who may use the library beginning March 23, 2020?	Mar 20 20, 17:01	9 (monthly)
Is the library open while BSU moves to fully online learning?	Mar 20 20, 16:53	100 (monthly)

Figure 8.

Usage of the FAQ, “How can I find free eTextbooks online?”

Digital repository

Maxwell Library has been developing its digital initiatives over the years. One of the initiatives is the BSU institutional repository (i.e. virtual commons). Virtual commons (VC) is an open-access repository for the scholarly works, research, publications, creative activities, newsletter, and reports produced by the BSU faculty, students and staff. Currently, VC has a total of 8,169 papers with over 3,486,376 total downloads as of April 30, 2020 [4].

The number of downloads from VC has increased approximately 13,000, comparing the numbers for FY19-FY20 March to April as shown in Figure 9. On the front end of this digital service, it does not seem that the use of VC has been affected by the pandemic. However, on the backend, there are several effects the pandemic has caused. One typical behind-the-scenes work is the digitization process of the non-born digital materials that use the equipment (e.g. scanners) and applications housed at the department.

Due to the telecommuting guidelines, this creates the barrier to access the digitization equipment; therefore, the digitization process was suddenly suspended. The work-study student who was trained to digitize these materials was required not to work during the pandemic period. The Digital Services Department has made the shift to the tasks that can be done at home, such as organizing the digital content it has collected, processing the materials that have been scanned, and ingesting them into VC. The department has also used the time to perform other tasks. For example, developing policies that guide the digital production and preservation; creating marketing materials for those underutilized collections; and managing the files stored in the servers in a better way.

Another interruption caused by the coronavirus outbreak is on individual workflows and processes that the department had used to collaborate with various BSU stakeholders (e.g.

Figure 9.

Comparison of the usage of Virtual commons between March 1, 2019–April 30, 2019 and March 1, 2020–April 30, 2020



academic departments and administrative units) who are the creators of the digital content. The library is currently working with these stakeholders in two areas:

One, completely getting rid of the manual file transfer of born-digital materials between the department and its partners. Some offices are used to transfer the digital content through a flash drive, the practice has currently been changed to directly transfer files over the internet. If the size is under the 29MB which is the maximum limit that an e-mail can attach, the file can be sent via email. If the file size is beyond 29MB, it is using Office 365 OneDrive where the partners can share the files with the department. As needed, the library may reach out to the university IT department and find the venues that can make the transfer of the files in a large size available efficiently, such as setting up a shared space over the network drive.

Two, for any agreements governing copyright and intellectual rights of digital works that were manually signed in the past, the library has been working with relevant departments to streamline the process. Recently, the library has collaborated with the Office of Honors Program to update the Honors Thesis Web Publication Form and convert this form into an editable PDF document. Therefore, honor students can electronically sign this agreement before the theses can be added to VC.

All these new practices have accordingly changed the responsibilities of library staff involved in the digital initiative. Like these digital services aforementioned, other librarians are considering initiating new projects or have been in the process of adapting current practice in their specific areas.

Reflections on best practices for digital library services

Through responding to the coronavirus pandemic from the middle of March to date, the following are the reflections on what can be considered for development now and in the future.

- Act fast in response to emergency situations and get out the information users need most in a timely manner. The first action should be delivered through multiple venues, such as social media, the group email lists for faculty and students, faculty liaisons, etc.
- Increase the awareness of public health and hygiene. Promote self-care of the internal library staff and advocate the hygiene practice for patrons who interact with library staff, especially in high traffic areas. How to safely quarantine library collections and materials may deserve careful consideration in the future.
- Develop a detailed opening plan and protocol when COVID-19 restrictions are lifted in the future, as the State of Idaho has laid out a phased reopening plan for libraries (Thill, 2020). There is a need to craft a disaster plan for the library and distinguish the division between essential and non-essential staff.
- Keep developing a digital library experience that enhances remote and distance learning through seamlessly accessing library e-resources and digital library services off-campus, actively integrating digital content and services into LMS and collaboratively connecting the BSU academic community, etc.
- Leverage technologies to promote digital library services such as holding a virtual research party. In this way, the library can reach out to faculty and students in a more effective and innovative way.
- Create a how-to knowledge base to support telecommuting in a collective way. The library staff can support each other collaboratively to go through the unprepared working condition. Training can be provided as necessary.

- Develop a unique collection that can archive and preserve the university announcements about the pandemic and document the practice, thoughts, and events of BSU members experiencing the unprecedented situation around COVID-19.
- Contribute to the collective understanding of how libraries are responding to the pandemic situation. For example, filling out the survey created by Ithaka S+R. This would help libraries all over the world update their responses as policies and practices change.

Conclusions

The COVID-19 pandemic has created an increasing need for serving BSU faculty and students who are realizing the significance of these digital library services more than before. Maxwell Library has always been at the forefront in providing a range of digital services.

The global pandemic has impacted digital library services, users and the 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. The challenges facing both the staff working in-house and at home are not minimum. Some of the challenges have opened the door for library staff to learn, to become more equipped with technologies and to be creative and collaborative, while some have created real barriers that affect their abilities to perform jobs. The challenges of digital library services are manifested in multiple aspects. Actively reaching out to faculty and students in the virtual world and engaging them with library services are of utmost importance and meanwhile of significant challenge.

Maxwell Library has been actively adjusting to the unprecedented period and continue delivering these services to its patrons. In addition to the instant response to the pandemic, the library has been taking measures by adapting its current practice and conducting new initiatives in such digital services as references, BI, the provision of the subscribed e-resources, course reserves, free e-Textbooks, OER materials and BSU institutional repository. The reflections indicate not only the needs that should be addressed now, but also the plans the library can consider and implement in the future.

The COVID-19 crisis has brought digital libraries into the limelight through the many benefits it has to offer, which were in the past unseen or non-existent. Digital libraries are demonstrating their potential by providing richer and free e-content and online services of high quality. Looking ahead, the use of digital library services will continue to grow exponentially. The global pandemic has not and will not rattle the essential role of a university library that provides support for faculty and students who teach and learn on-campus or off-campus before, during, and after the global crisis.

Notes

1. www.bridgew.edu/covid-19/important-update-message-president-clark-march-16-2020
2. www.bridgew.edu/covid-19/notice-building-access-effective-323
3. <https://library.bridgew.edu/home>
4. <https://vc.bridgew.edu/>

References

- Fiore, J.D. and Wilson, D.K. (1976), "Bridgewater state college: as we were... as we are, 1840-1976. Histories of Bridgewater state university", available at: http://vc.bridgew.edu/bsu_histories/1 (accessed 24 March 2020).

-
- Mahnaz, D. (2020), "Ramping up remote reference during COVID-19 campus shutdowns, library journal", available at: www.libraryjournal.com/?detailStory=ramping-up-remote-reference (accessed 30 April 2020).
- Maxwell Library, Bridgewater State University (2020), "Coronavirus and Maxwell library", available at: <https://library.bridgew.edu/Coronavirus-and-Library-Services> (accessed 30 April 2020).
- Michonski, H. (2020), "Campus assists international students unable to return home due to pandemic", available at: www.bridgew.edu/stories/2020/extended-stay (accessed 12 April 2020).
- Office of Institutional Research, Bridgewater State University (2019), "Bridgewater state university Factbook, 2018-2019. In BSU institutional research and assessment Factbooks", Publication 28, available at: <https://vc.bridgew.edu/factbook/28> (accessed 23 March 2020).
- Office of the President (2020), "COVID-19: BSU moves to fully online/remote learning through the remainder of spring semester - March 16, 2020", available at: <http://libraryguides.vu.edu.au/harvard/internet-websites> (accessed 30 April 2020).
- Peet, L. (2020), "Lisa Janicke Hinchliffe and Christine Wolff-Eisenberg discuss academic library response to COVID-19", *Library Journal*, available at: www.libraryjournal.com/?detailStory=lisa-janicke-hinchliffe-christine-wolff-eisenberg-discuss-academic-library-response-to-covid-19 (accessed 16 April 2020).
- Riehman-Murphy, C. and Hunter, J. (2019), "Affirming the research party reference model", *Reference Services Review*, Vol. 47 No. 1, pp. 48-59, doi: [10.1108/RSR-11-2018-0071](https://doi.org/10.1108/RSR-11-2018-0071).
- Rondileau, A. (1991), *Bridgewater State College: Adventure in Excellence*, Bridgewater State College Foundation, Bridgewater, MA, available at: <https://vc.bridgew.edu/cgi/viewcontent.cgi?article=1009&context=anniversary> (accessed 24 March 2020).
- Massachusetts Department of Higher Education (2020), "COVID-19 information and resources", available at: www.mass.edu/covid-19/home.asp (accessed 30 April 2020).
- Thill, J. (2020), "A phased reopening plan for libraries as COVID-19 restrictions are lifted", available at: <https://medium.com/@john.alan.thill/a-phased-reopening-plan-for-libraries-as-covid-19-restrictions-are-lifted-2d96885c0c1d> (accessed 10 April 2020).

Further reading

- Boyden, A.C. (1933), "The history of bridgewater normal school, histories of bridgewater state university", available at: https://vc.bridgew.edu/bsu_histories/2 (accessed 23 March 2020).

Corresponding author

Xiaocan Wang can be contacted at: x4wang@bridgew.edu

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgrouppublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com