The COVID-19 Pandemic and the Rapid Shift to an Exclusively Online Format: Tracking Online Instructors' Utilization of Library Services Over a Year of Virtual Learning at the University of Memphis

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At the beginning of the Spring 2020 semester, academic institutions in the United States shifted rapidly to virtual instruction amid the COVID-19 pandemic. This shift forced the libraries associated with these institutions to create innovative ways to reach faculty, staff, and students in an online mode. At the University of Memphis, librarians enhanced many existing online services and developed new ones. This study tracks the utilization of these services by online instructors during the span of one year since the COVID-19 pandemic began. The methods were mixed, involving a survey soliciting information from online instructors using both qualitative and quantitative methods and follow-up interviews conducted privately and virtually with teaching faculty and staff. This article presents the findings of this research and details the plans for further action at the University of Memphis to enhance and promote library services to online faculty. The plan involves increasing the level of online marketing, involvement with faculty training, and the enhancement of existing services, specifically embedded librarianship.

Introduction

During the COVID-19 pandemic, academic librarians worldwide rose to the challenge when students, faculty, and staff shifted abruptly into the world of online learning. Existing online services such as embedded librarianship, virtual reference, research consultations, Interlibrary Loan (ILL), and electronic resources were enhanced, and formerly in-person services such as the reference assistance desk, library tours, and information literacy instruction sessions were adapted to be exclusively in virtual format for the first time. While many libraries around the world physically closed for months, University Libraries (UL) at the University of Memphis remained open even after the safer-at-home order was issued in Memphis in March 2020.

The University of Memphis is an R2 institution in an urban setting. Its student population was 22,203 in the Fall of 2020, but enrollment, specifically online and at the graduate-level, is steadily increasing. According to the Facts at a Glance website, the University of Memphis has

approximately 2,500 employees including 930 full-time faculty. There are thirteen colleges at the University of Memphis as well as seventeen bachelor's degrees in more than 250 areas of study, master's degrees in fifty-four subjects, doctoral degrees in twenty-six disciplines, education specialist degrees in two areas, and graduate certificate programs in forty-four areas of study.[1] Furthermore, UofM Global provides programs and degrees fully online. Through UofM Global, it is possible for students to gain a quality education without ever stepping foot on campus. Other programs include the Cecil C. Humphrey's Law School, the only law school located in Memphis. UL comprises McWherter Library on the main campus and three branches: The Music Library, the Health Sciences Library, and the Lambuth Library. Since the branch libraries are part of UL, all services offered at McWherter Library can also be offered at any of the branch libraries. This includes online services such as instruction, chat, and research consultations. The McWherter Library (located on the main campus) never closed its doors completely, but physical access was limited to members of the campus community. Only patrons with an active University of Memphis ID card were able to enter. The three branches closed temporarily and reopened (again, with limited access) at the beginning of the Fall 2020 semester.

COVID-19 Efforts at University Libraries

For the librarians at the University of Memphis, there was a consolidated effort to find online alternatives for all existing services. Librarians continued to provide reference services through online research consultations and chat. Online library instruction was implemented, a service that had never been approached at UL before. Rather than cancelling library instruction sessions, they were redesigned quickly to be presented in an online format through asynchronous tutorials and video conferencing (via Zoom). Other instruction efforts involved the creation of a virtual library tour using a mobile device. UL also was the chosen site for providing laptops and hot spots to be checked out for the duration of a semester. The Circulation Department provided a pick-up service that enabled a member of the University of Memphis community to make a request for an item (using a form online or calling). An employee in the Circulation department would then search for the book in the upper floors, disinfect the item, and allow the patron to pick up the item at the Circulation Desk. This limited the high numbers of patrons in the stacks and helped promote social distancing guidelines. The three branch libraries – Music, Lambuth, and Health Sciences – were closed, but the Music, Lambuth, and Health Sciences librarians continued to offer their services online through research consultations and meetings via video conferencing. UL also hired a Virtual Instruction Librarian and a First-Year Experience Librarian despite a hiring moratorium at the University of Memphis. These positions were an exception since they would help provide essential services to the University while all courses were online.

Requests for electronic resources and interlibrary loan items increased as well. These were promptly accommodated by the librarians and staff at UL, including scanning documents located in McWherter Library to minimize the number of patrons entering and exiting the library. Documents that needed to be viewed in person, such as primary sources located in the Special Collections Department, could be requested in advance, disinfected, and provided to the patron in a socially distanced, contained manner.

Literature Review

There were not many research studies on academic libraries' responses to the COVID-19 pandemic yet. There were reports of responses to the pandemic, but they were limited, providing

evidence of patron feedback only through social media and observations. Furthermore, there were none that provide online instructors' experiences with the online services provided. Several studies focused on the utilization of library services overall. For example, Amity University in Lucknow, India, tracked the utilization of electronic resources by researchers and post-graduate students, concluding there were many factors influencing the low number of usages at this site. Among these were limited access to computers, internet speed, inadequate number of titles, and lack of technical support.[2]

But faculty were not included in the participants. Before the pandemic, the University of Northern Colorado studied library usage by undergraduate students. The librarians analyzed the relationship between undergraduate student success and library usage overall and found a small correlation to the role teaching faculty play in their findings. Students from a student success program reported high use of the library because instructors were assigned librarians to work with them.[3] The success of these students increased because the instructors were involved in their students' decisions to use the library. There were more recent studies of library utilization,[4] but none that provided feedback from online instructors specifically.

Other studies analyzed specific online library services. The University of North Florida investigated the importance of a library's integration into Canvas, a learning management system (LMS). The study included an online instructor's ability to select and incorporate research guides into their course shells created by the library, as well as the SpringShare chat widget to the LMS (which facilitated students' interactions with librarians). The project "…not only increased the library visibility in the online environment but enabled all students, whether in-person, hybrid, or online, with direct access to the resources they needed for their coursework."[5] Likewise, Jimmy Ghaphery and Erin White spoke on the use of research guides at Virginia Commonwealth UL. But this study was conducted through analyzing in-house data and interviewing other academic librarians.[6]

In 2021, during the COVID-19 pandemic, librarians shared observations of the effects that the previous year, amid the shutdowns and service limitations, had on libraries. Many studies used data from the beginning of the pandemic, many as far back as the Spring 2020 semester.[7] The University of Toledo described the development of one-shot information literacy sessions delivered online in March 2020[8] but did not acknowledge the aftermath of this shift and its long-term effect on the patrons. In an extensive report (published at the beginning of the pandemic in May) on the maintenance of library services during the pandemic, Peggy Johnson observed budget reductions to ensure services are maintained for patrons. But she states explicitly, "My thoughts on this are based on assumptions and perceptions …and my best guesses."[9] Many authors confirmed the limitations of these studies because data collection and the shift to online learning occurred instantaneously. The Knowledge Centre for Health Ghent in Belgium used the COVID-19 pandemic as an opportunity to assess users' needs and reorient their services for future years.[10] Likewise, Samantha Harlow at the University of North Carolina conducted a qualitative study on her library's chat service during the COVID-19 pandemic.[11]

Literature released in 2020 about the utilization of library services focused primarily on all patrons including students, faculty, staff, and community members. The University of Toronto observed positive feedback on their social media accounts and were encouraged by their efforts.[12] At Singapore Management University, one researcher observed, "We do not know what the future holds for us, but now libraries are learning to adapt.… Libraries have always been and will continue to be… a provider [*sic*] of credible and important information…."[13] Likewise, Western

Colorado University reported on the importance of collaboration and resilience between various higher education departments during the COVID-19 pandemic.[14] While these were encouraging sentiments, they did not address the satisfaction of the patrons over the duration of the COVID-19 pandemic. These studies were, understandably, limited because of the changing nature of the pandemic and the evolving decisions academic institutions faced daily. Academic librarians can gather information from their own institutions, peruse the literature on the subject, or make decisions based on prior studies of disaster preparedness and online information services. At the time that this article was written, it was apparent that certain library services will remain online for the time being until COVID-19 cases decrease and vaccinations are widespread.

Fortunately, studies on disaster preparedness in academic libraries were conducted before the COVID-19 pandemic. In 2007, the University of Minnesota's Bio-Medical Library assisted in a plan for continuing educational programs in the event of a pandemic influenza outbreak. This was in response to the "ongoing health concern"[15] of ten influenza pandemics. Amid these ten, the three deadliest were the "Spanish flu" (1918–19), the "Asian flu" (1957–8), and the "Hong Kong flu" (1968–9). The recommendations from this task force were intensive training for all teaching faculty on using WebCT (otherwise known as Blackboard, an LMS), reserving at least two faculty members qualified to continue course instruction in the event of illness, mandatory training for all faculty with certificates guaranteeing that the individual faculty member have the necessary skills to continue courses online at the basic level, routine maintenance of the LMS, and that documentation for all legislation for emergencies should be communicated clearly and be easily accessible.[16] These findings are helpful and can be applied to the continuity of academic libraries during future disasters.

Research Questions

This study tracks the utilization of library services among online instructors during the span of one year since the COVID-19 pandemic began. The methods were mixed, involving a survey soliciting information from online instructors using both qualitative and quantitative methods and follow-up interviews conducted virtually with teaching faculty and staff. This article presents the findings of this survey (Appendix A) and proposes further action for the librarians at the University of Memphis to enhance and promote services to online faculty. Questions were designed to glean an understanding of online instructors' satisfaction with UL's efforts to provide online services and answer the following research questions:

- Has the behavior of University of Memphis online instructors changed toward UL during the Covid-19 pandemic? If so, how and why?
- According to online instructors' feedback, has UL offered adequate virtual services during the Covid-19 pandemic?
- What is the reason for the noticeable decrease in online instructors' utilization of certain library services?
- What can UL do to enhance and promote library services for University of Memphis online instructors during the remainder of the Covid-19 pandemic and online instruction overall?

Methods

Both quantitative and qualitative methods were used in this research study. The Virtual Instruction Librarian at the University of Memphis sought to effectively provide UL services to online

FIGURE 1
How Many Semesters (Including Summers) Have You Taught Online Courses?
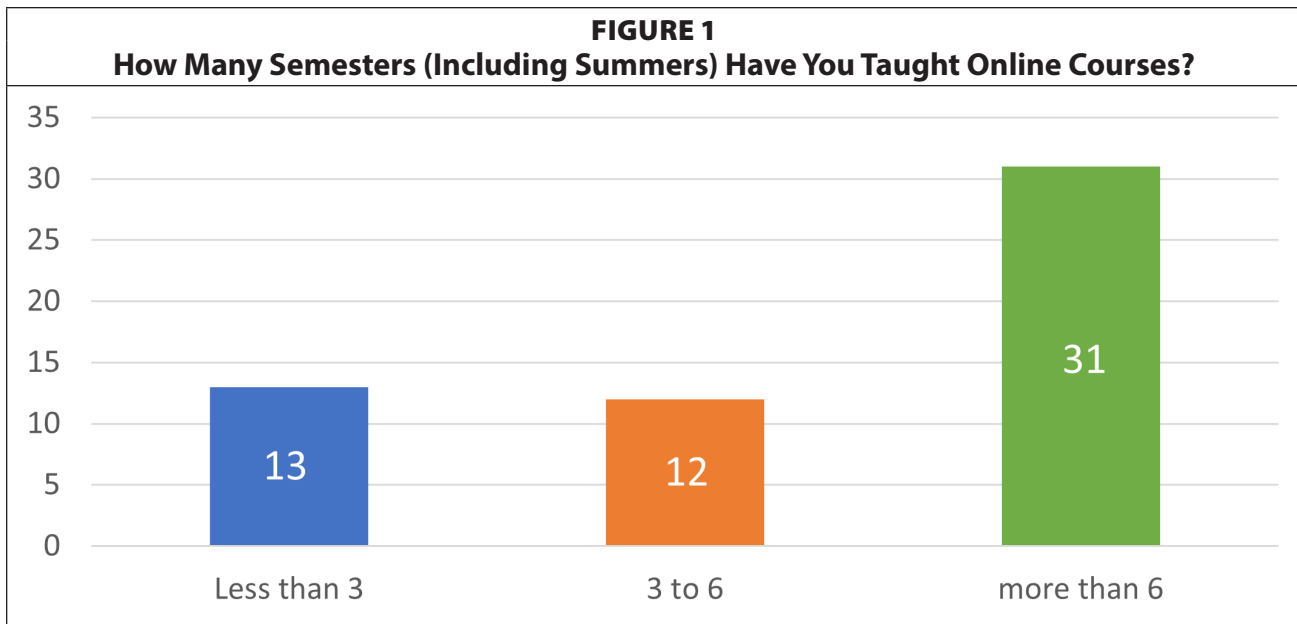
faculty. Since all faculty were considered online faculty during the pandemic, the 2020–21 academic year was a prime opportunity to reach a broad spectrum of participants. The confidential survey developed by the Virtual Instruction Librarian was distributed among all Deans and Department Chairs at the University of Memphis, including instructions to encourage all faculty teaching an online class to participate. Responses were gathered on February 22, 2021. The survey consisted of open-ended, ranking, multiple choice, and Likert scale questions. Furthermore, participants had the option to be contacted for a follow-up interview, but only two responded to this call. Interview questions for these participants appear in Appendix B. This research study was evaluated and approved by the Institutional Review Board (IRB) at the University of Memphis.

Participants

There was a total of fifty-six respondents to the survey. All were online instructors at the University of Memphis. Thirty-one participants reported they are experienced in teaching

FIGURE 2
What Student Level Do You Teach Online?
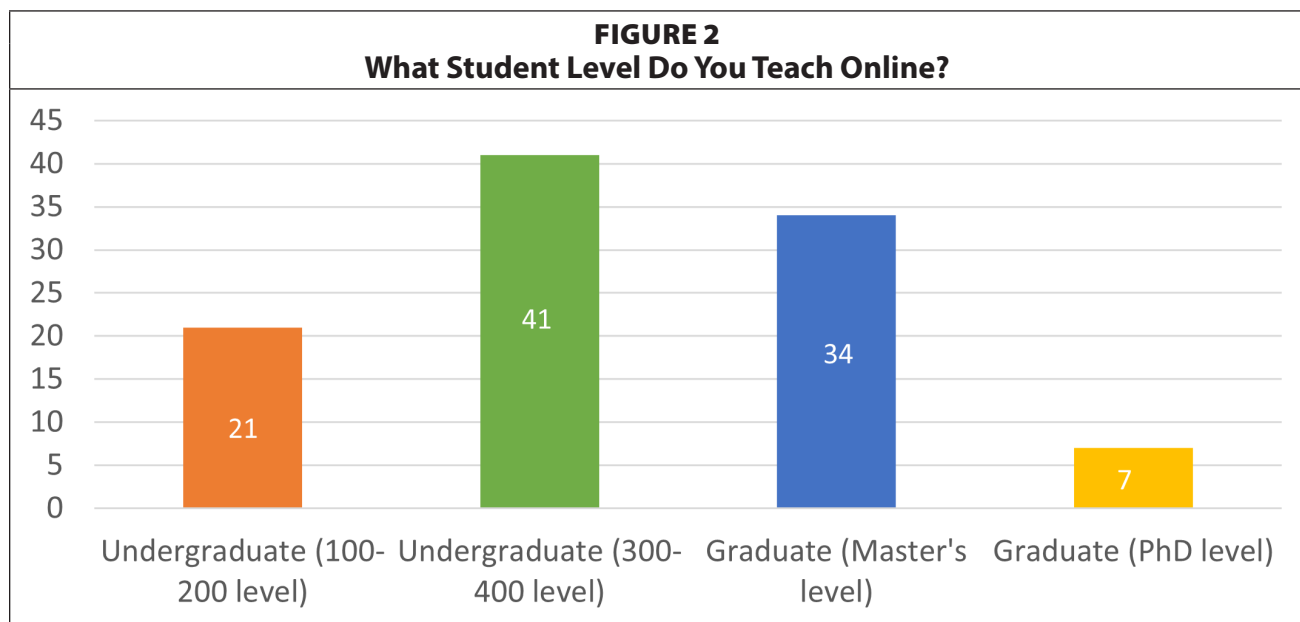
courses online (a minimum of six semesters). Thirteen reported they have taught fewer than three classes online, and twelve reported they taught three to six. This is reflected in figure 1.

Most participants (forty one) taught upper-level undergraduate courses (300–400 level). Thirty-four participants taught online graduate level courses at the master's level, twenty one taught online undergraduate level courses at the 100–200 level, and seven taught online PhD level courses. This is reflected in figure 2.

A variety of departments and subjects were represented. Appendix C (table 1) represents the survey results for the participants. It includes the subjects, number of courses, and number of participants who taught a particular subject.

Limitations

As reflected in appendix C, English, Music, and other subjects with an intensive research component are not represented highly in this survey. Therefore, the data might not be the most accurate representation of the overall use of services since the results do not include the departments that work most closely with UL, daily. However, this did give UL the opportunity to hear from departments historically lacking consistent communication with UL. Likewise, as demonstrated in the results below, just taking the survey alerted faculty to online services they were unaware of. Another limitation concerns the distribution of the survey. It was sent to all department chairs at the University of Memphis with instructions to provide it to all online instructors in their departments. In other words, the effective distribution of the survey to all online instructors at the University of Memphis relied solely on the department chairs to provide the information. It is unknown if all department chairs followed these instructions.

Results

The results of the survey are divided into quantitative and qualitative data sections. The qualitative provide valuable insight into UL's services and explanations for responses.

Quantitative Results

Participants were asked to describe their use of Libraries services in their online courses. They were given a variety of options to choose from and could check all that applied. These options can be found in appendix D. Fifty-eight selections indicated many participants mostly use electronic resources in their online courses. There were thirty-two selections for uploading PDFs of online articles, e-books, etc. for course readings and twenty-six selections for inserting permanent links/stable URLs to online articles, e-books, etc. for course readings as well. The other most-selected choices were encouraging students to make a research consultation with a librarian (fourteen) and to use Resource Delivery/Interlibrary Loan services (thirteen). Twelve instructors indicated they do not use Libraries services in their online courses at all. There were eleven selections for streaming media sites (Kanopy is the most-used at the University of Memphis). Nine instructors encouraged students to employ the online chat service, eight instructors linked Research Guides in eCourseware, and seven instructors placed materials on course reserve. For the other choices, less than five instructors took advantage of these services and none at the Health Sciences Library and Music Library (these disciplines were not represented). The top five results are reflected in figure 3.

The next question provided the participants with the same choices, which they were asked to rank from most useful to least useful. The seven most useful were categorized as

FIGURE 3
How Have You Utilized University Libraries' Services In Your Online Courses?
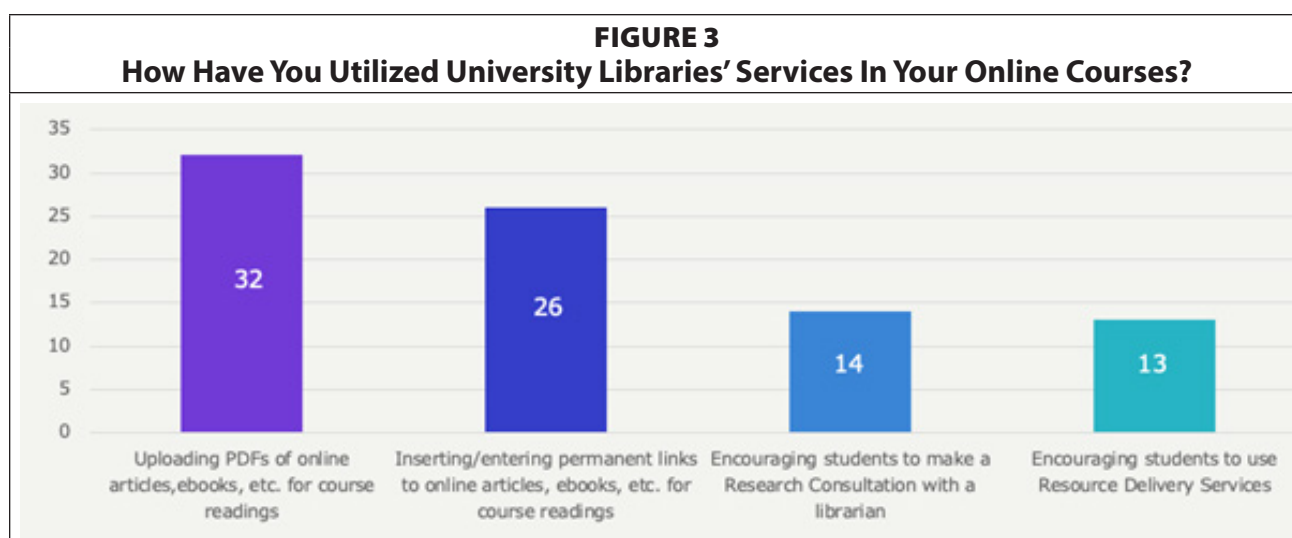
seeking research assistance and accessing library resources. The highest choice was inserting permanent links/stable URLs to online articles, e-books, etc., and the second-highest choice was uploading PDFs of online articles, e-books, etc. Other than these two services managed by the Electronic Resources Librarian, those identified as most useful were provided by the Research and Instructional Services Department. These include, in order from most useful to least useful, research guides, research consultations, video tutorials, and chat. The second category comprised services involving various departments within UL with a virtual library instruction session being the ninth choice and the Music Library being the last. Dividing the two categories is "I have not used any library resources in my online courses." Table 2 reflects the order of most useful to least useful.
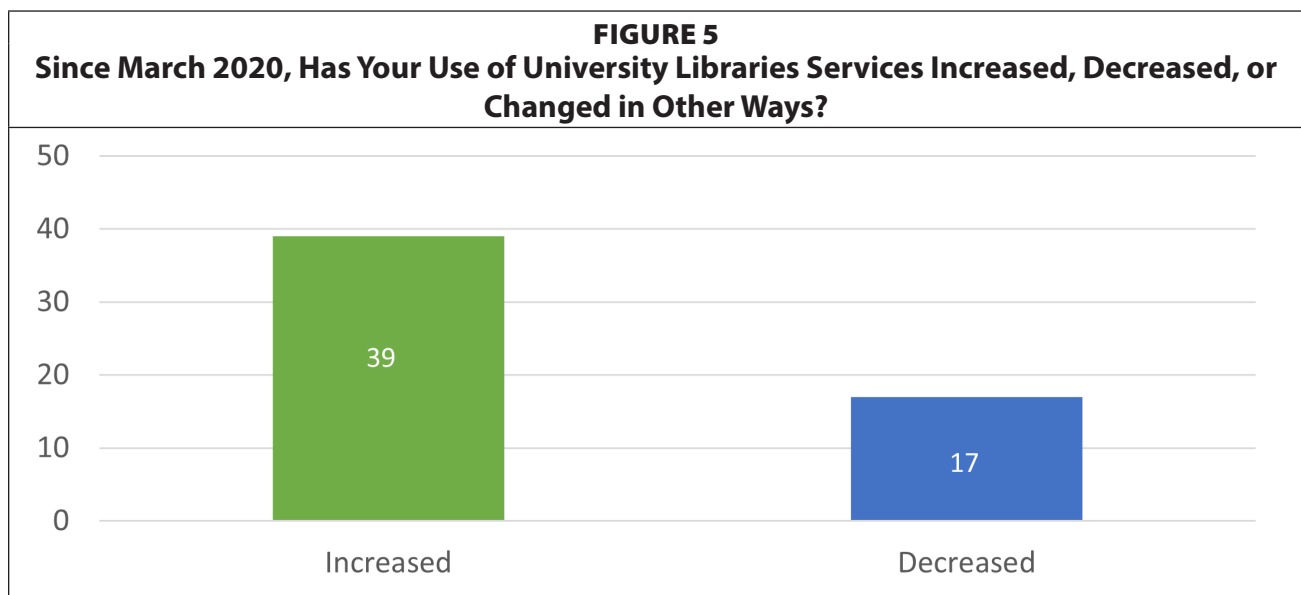
TABLE 2
University Libraries' Services Ranked from Most Useful to Least Useful

Rank	Service
1	Inserting permanent links to online articles, e-books, etc.
2	Uploading PDFs of online articles, e-books, etc.
3	Using an embedded librarian
4	Research Guides
5	Research Consultations
6	Providing links to video tutorials created by UL
7	Chat
8	I have not used any library resources in my online courses.
9	Virtual instruction session
10	Resource Delivery/Interlibrary Loan
11	Special collections
12	Placing materials on course reserve
13	Government publications
14	Streaming media sites (Kanopy, MetOpera, etc.)
15	Health Sciences Library
16	Music Library

FIGURE 4
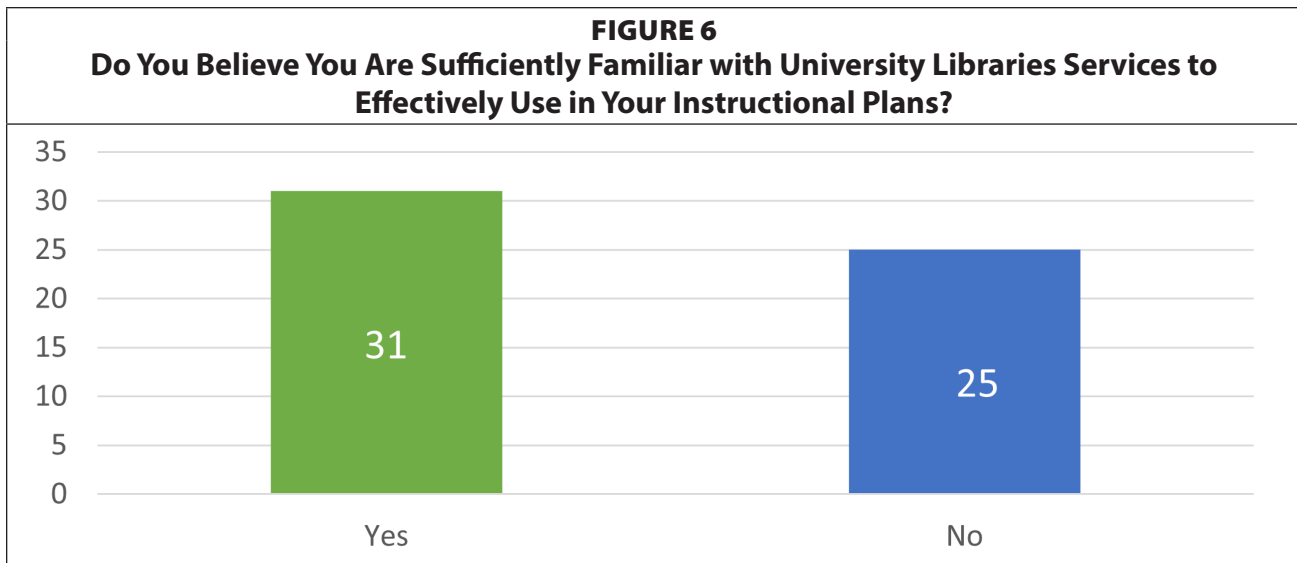**How Can University Libraries Assist You and Your Students in The Future?**
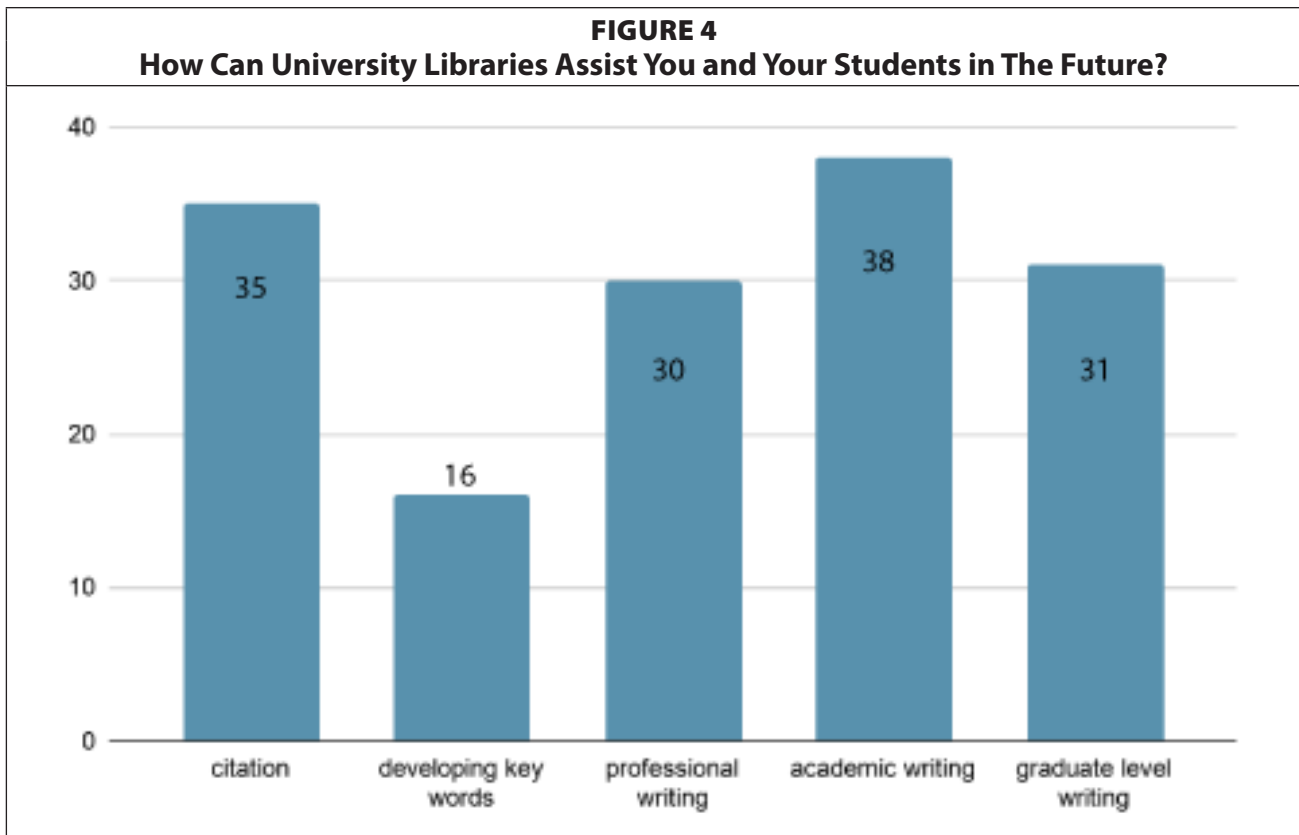
The instructors were asked how the Libraries might assist them with content in their online courses. In order of preference, the majority of participants desired assistance with academic writing skills (thirty-eight selections), citation (thirty-five selections), graduate level writing skills (thirty-one selections), and professional writing skills (thirty selections). Sixteen participants requested help with developing key words for improved searching. These responses are reflected in figure 4.

The next section of quantitative data addressed the changes in participants' utilization of Libraries services during the COVID-19 pandemic: Had it decreased, increased, or changed

FIGURE 5
Since March 2020, Has Your Use of University Libraries Services Increased, Decreased, or Changed in Other Ways?

FIGURE 6
Do You Believe You Are Sufficiently Familiar with University Libraries Services to Effectively Use in Your Instructional Plans?
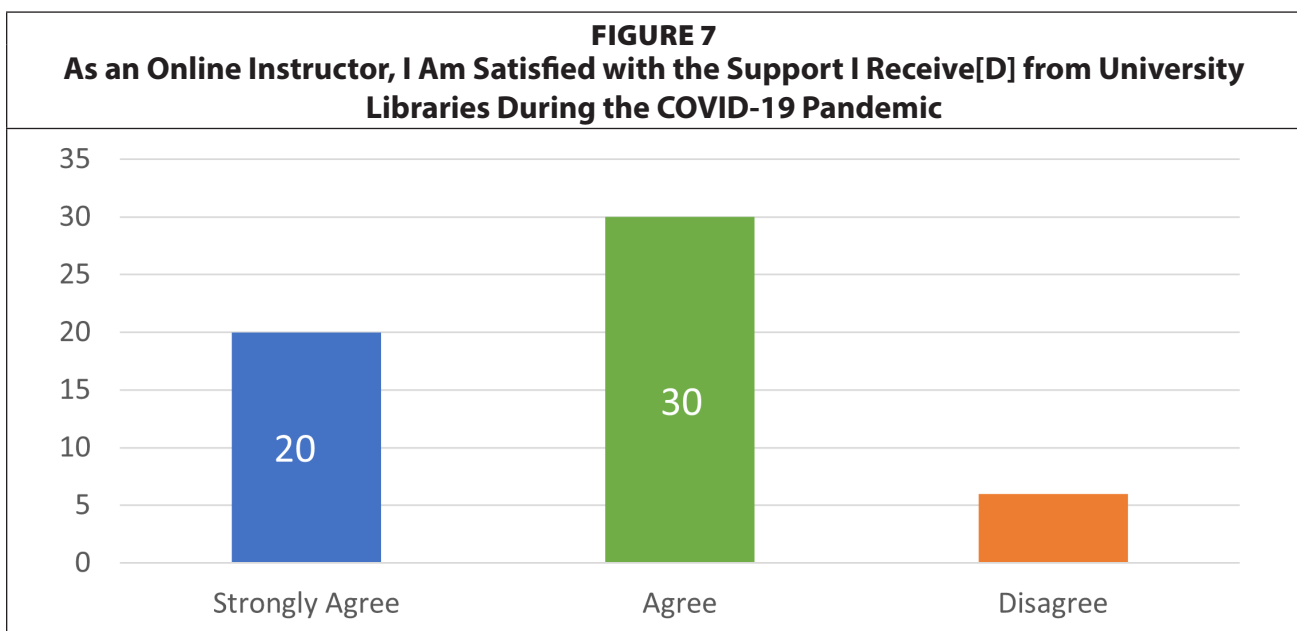

in other ways? Thirty-nine indicated their use of Libraries services increased, but for seventeen it decreased. These results are reflected in figure 5. In the open-ended response section, sixteen participants stated that their utilization of services did not change at all. They used the same services they had prior to the COVID-19 pandemic but did not take advantage of others despite the expansion and addition of many.

Participants were also asked if they had stopped using a particular library service since the COVID-19 pandemic. Forty-seven checked no; nine checked yes. When asked if they had started using a Libraries service during the COVID-19 pandemic, thirty-nine responded no; seventeen said yes. The participants had an option to provide open-ended responses to justify their answers. Identified services online instructors started using during the COVID-19 pandemic were chat, Kanopy, Scopus, and permanent links/stable URLs.

The final section of quantitative data assessed the level of communication between UL and online instructors. When asked if they considered themselves to be sufficiently familiar with UL services, thirty one stated yes, while twenty five stated no. When asked if they were

FIGURE 7
As an Online Instructor, I Am Satisfied with the Support I Receive[D] from University Libraries During the COVID-19 Pandemic

satisfied with the support they received from Libraries during the COVID-19 pandemic, twenty strongly agreed, thirty agreed, and six disagreed. These results are reflected in figures 6 and 7. These results were encouraging, but the next question asked if they would have liked more assistance from UL during the COVID-19 pandemic. Thirty-four disagreed and twenty two agreed. Explicit feedback from this question revealed that online instructors would have liked to know more about our services and were not sufficiently aware of the online expansion that occurred during the COVID-19 pandemic.
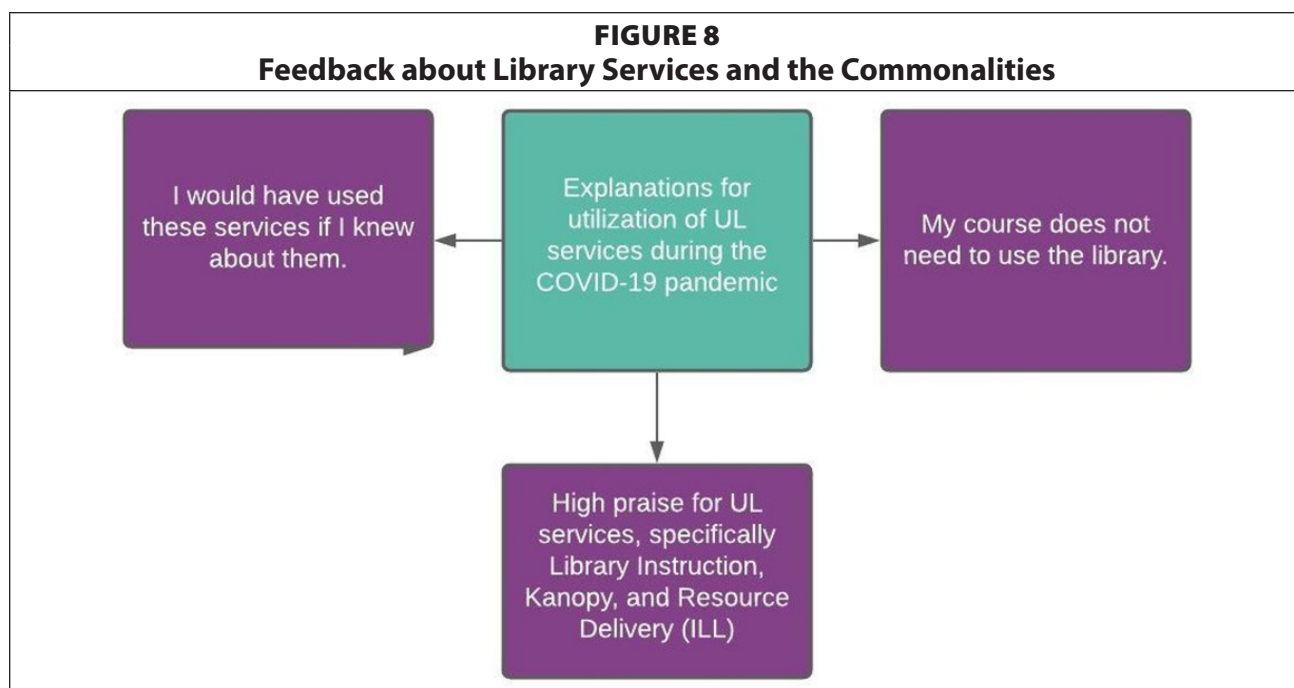
Qualitative Results

Qualitative data was gathered through open-ended questions throughout the survey and two follow-up interviews with online instructors (the open-ended questions can be found in appendix A, and the interview questions can be found in appendix B). The qualitative data reflected the use of UL's online services by online instructors at the University of Memphis. Instructors were asked to rank the most useful services to the least-useful services and to explain their choices. Examples of explicit feedback are found in table 3 and reflect the most common open-ended responses.

TABLE 3 Of the University Libraries Services and Resources Used in Your Online Courses, Please Rank in Order from Most Useful to Least Useful.	
Participant #3	"I find the one-on-one assistance available through a research appointment or online chat to be the most effective, particularly when students contact me afterward to describe what they learned, how it will influence their projects, and ask me follow up questions."
Participant #5	"I have not used the library's resources as the course syllabus/outline has been developed by another professor. I implement the course syllabus, guidelines, and expectations."
Participant #13	"I like providing the permanent links so that students can see how easy it is to research our online libraries. I like to create self-directed learners, so I encourage students to fully engage with the online libraries by clicking links and scheduling appointments with library staff."
Participant #19	"As I only teach adjunct now, I have less and less awareness of campus resources. The students in my program tend to have limited financial resources, so the more material I can provide for free, the better."
Participant #22	"I use Kanopy and embedded article in most of my courses. This has been especially valuable since the pandemic."

Many addressed the need for increased communication about our services but also stated that their classes did not use library services and resources because all content was in the syllabus and/or the course textbook. Other comments worth mentioning included praise for specific services such as Library Instruction (including information literacy sessions and embedded librarianship), Kanopy, and Resource Delivery (ILL). A consolidation of this feedback about library services and the commonalities are reflected in figure 8.

To track utilization of services during the COVID-19 pandemic, specifically, online instructors were asked about their interaction with the library since March 2020 and the shift

FIGURE 8
Feedback about Library Services and the Commonalities

I would have used these services if I knew about them. ← Explanations for utilization of UL services during the COVID-19 pandemic → My course does not need to use the library.

↓

High praise for UL services, specifically Library Instruction, Kanopy, and Resource Delivery (ILL)

TABLE 4
Since March 2020, Has Your Use of University Libraries Services and Resources Increased, Decreased, or Changed in Other Ways?

Participant	Increased or Decreased?	Why?
Participant #2	Decreased	"I usually set up multiple sessions for my students, but we are not on campus and finding synchronous meeting times has been challenging."
Participant #3	No Change	"It has really stayed the same."
Participant #15	Increased	"…moved to use of library e-books for courses; require library sources only for research papers."
Participant #22	Increased	"Media resources were more important because of less face-to-face interactions with students."
Participant #31	Increased	"The willingness of the library to get e-books that I've assigned in my online classes that the library didn't already own—I didn't know I could ask for this before the pandemic. Having electronic versions of the books I've assigned has been very helpful to everyone. Before, I thought I was just out of luck if we didn't already own an e-version of an assigned text. Same for movies that I would show in class via DVD. It's been wonderful to have help getting access to these online."
Participant #32	Increased	"Fewer students on campus, leads to less interaction in the physical building. Those services that were currently available in the courseware are being used at the same rate, with maybe a slight uptick in usage."
Participant #38	Decreased	"I changed the final project in my classes to not include the requirement that they research the academic literature on a topic; I worried that without in-person instruction in class and at the library (where we had an in-person session on academic sources previously) they would not be able to carry this out well. Now they read the news and use what they learn to make sense of current events instead."

to online learning. Data was gathered in a quantitative manner, but instructors were asked to provide an open-ended response clarifying their answers. For example, when asked if their use of library services since March 2020 has increased or decreased, many explained their reasoning for their answers. Examples of these responses (table 4) are reflective of the most common open-ended responses. Many instructors who selected the option of "decreased" opted not to provide an open-ended response. Sixteen participants stated that their use of the library has not changed during the COVID-19 pandemic.

When prompted to provide recommendations to further enhance online services, participants suggested virtual tours, presentations about services, APA tutorials and videos, plagiarism and citation videos, prompt response to inquiries, writing and citation resources, instructor outreach, longer check-out periods, instruction sessions on Libraries resources, and basic library videos.

Discussion

Apart from instructor outreach and increasing visibility, UL provided these recommended services to all students, staff, and faculty. One service added in response to the COVID-19 pandemic is the option for faculty to request instructional materials such as video tutorials, research guides, self-guided tutorials, self-guided tours, and handouts—in addition to instruction sessions or embedded librarians. Materials such as the APA tutorials and videos, virtual tours, plagiarism and citation videos, presentations, and basic library videos can be requested through a link on our homepage and are fulfilled in a timely manner. Materials such as the writing and citation resources, instruction sessions, and basic library videos were available on the UL website as content on Research Guides. Prompt responses to inquiries are addressed through virtual reference with increased hours and staffing. In anticipation of increased use, the number of UL personnel on chat shift was doubled and the service hours increased to include weekends and evenings. Longer check-out requests can be fulfilled. However, many of the instructors who participated in the survey were unaware of these options.

The impact of this study on the University of Memphis and other academic libraries moving forward during and after the COVID-19 pandemic can be separated into three categories: Marketing and Outreach, Faculty Involvement and Training, and Enhancement of Existing Services.

Marketing and Outreach

Based on the results of this study, UL's previous outreach efforts were insufficient to promote online services to faculty. Outreach efforts during the COVID-19 pandemic were limited to social media posts and consistent e-mails sent from the Executive Director/Associate Dean of Libraries to Deans and Department Chairs at the University. UL's liaisons also notified departments through e-mail. Ideally, the liaison program would have increased communication with faculty, but in an interview an online faculty member stated she did not know the liaison program existed or how to request journals for her students. While the qualitative data from the survey indicates that online faculty who knew about the UL's online services during the COVID-19 pandemic believed the services were exceptional in quality, there is clearly a communication divide between University of Memphis librarians and online faculty. Proposed solutions recommended by UL faculty strongly encourage better marketing through increasing visibility on campus and to develop more effective outreach efforts to online faculty at the University of Memphis. Librarians at UL, particularly those from the Research and In-

structional Services Department, the Music Librarian, the Health Sciences Librarian, and the Lambuth Campus Librarian, began developing action items to increase communication with faculty, including online instructors, which began during the Fall 2021 semester. Research and Instructional Services Librarians developed a presentation to present both online and in-person at faculty departmental meetings. UL's Executive Director/Associate Dean confirms that further research will be conducted on how to better market our services to faculty. UL's Virtual Instruction Librarian conducted more follow-up interviews with online faculty to hear their concerns and inform them of services already in place. A UL committee whose sole purpose is to develop faculty outreach strategies was formed in May 2021 to support the UL's Outreach Associate's efforts to increase the UL's presence online through social media, events, and faculty outreach..

Faculty Involvement and Training

During the Summer 2021 semester, UL merged with two other departments on campus: Center for Teaching and Learning and the Center for Innovative Teaching and Learning to form UM3D. This is to assist online instructors with instructional design and incorporate information literacy concepts in courses from the very beginning of the course assessment and design process. Librarians and University of Memphis's instructional designers now work together to develop various materials and present at trainings for faculty. This allows UL the opportunity to inform faculty of the multiple services UL can offer instructors and provide best practices for utilizing electronic resources. Furthermore, UofM Global is working closely with University Libraries to enhance its presence in the University's LMS and will provide links to UL webpages in University of Memphis websites. As the University's fully online program, UofM Global is an important ally for UL in reaching online faculty and providing training. UL marketed their services during the summer faculty training (UofM Global Summer Institute 2020) and presented during the winter faculty training after the Fall 2021 semester (UofM Global Winter Summit 2021).

Enhancement of Existing Services

Based on this study's findings, library instruction is listed as one of the most useful services. University of Memphis librarians and staff are developing hybrid instruction services to support online faculty and students on the main campus and with students at the Lambuth campus in Jackson, TN. Furthermore, Research and Instruction Librarians attended the Library Instruction Tennessee 2021 Conference and are seeking to enhance one-shot information literacy services by providing information literacy workshops instead. Interlibrary Loan and Electronic Resources (including Kanopy) were also listed very highly on the most useful results. While many instructors do not desire any changes to be made to these services, the Resource Delivery/Interlibrary Loan Department is piloting the Article Galaxy Scholar, which offers instant purchase-on-demand (POD) access to research articles not available in the University Libraries' collection based on cost, interest, and usability. Furthermore, UL will soon provide access to open educational resources (OER) for faculty, staff, and students at the University of Memphis. Lastly, a follow-up study to enhance the embedded librarianship service has been approved by the Institutional Review Board (IRB) to increase the expectations of online instructors who utilize the service. Embedded librarians will increase communication with online instructors and be more involved in the course design process. Instructional materials

(such as library tutorials, research guides, videos, etc.) will be embedded in the online course as well. This study will provide the Research and Instructional Department with an avenue to enhance the embedded librarianship service and increase communication between University of Memphis librarians and online faculty.

Conclusion

Many online instructors are grateful for the support and services received from the Libraries during the COVID-19 pandemic—when they know about them. Whereas many instructors felt that they did not need the library's assistance in their courses, the majority felt that they would have used more of UL's resources if they had received notice on what services were offered to them and training for how to utilize these services. Through marketing, faculty training, and enhancement of existing services, UL can better reach online faculty who may not be able to take advantage of the in-person services offered on campus. The COVID-19 pandemic has affected the utilization of library services in a myriad of ways. According to many online instructors at the University of Memphis, the utilization of certain services such as Interlibrary Loan and Electronic Resources have greatly increased because all courses were being taught exclusively online. But many of the other efforts in the library to provide quality online instruction went unnoticed. Even though the Research and Instructional Librarians worked to provide online information literacy instruction sessions, embedded librarianship, and more, requests were at an all-time low. Furthermore, since many online instructors (sixteen out of fifty six) indicated their utilization of the library had not changed, this shows that many new services that were enhanced and/or created during the pandemic went unnoticed. At the time this article was written, the COVID-19 pandemic is still a global crisis, despite the availability of vaccinations. This affects libraries worldwide that are still seeking ways to provide and promote services that continue to meet the information needs of their communities. At the University of Memphis, librarians are taking the information gleaned from this study to continue to enhance services and increase communication with faculty, especially as more students continue to take classes online. Currently, it is apparent that, even when the COVID-19 pandemic abates, online learning is becoming a, if not the, primary format for higher education. This study is just the beginning for what this will look like for academic libraries..

Acknowledgements

Appendix A

1. How many semesters (including summers) have you taught online courses?
    a.   Fewer than 3
    b.   3–6
    c.   More than 6

2. What student level do you teach online? Check all that apply.
    ____ Undergraduate (100–200 level courses)
    ____ Undergraduate (300–400 level courses)
    ____ Graduate (Master's level courses)
    ____ Graduate (PhD level courses)
    ____ Other _____

3. List the specific online courses you teach in your subject area in the box below (Please submit in the following format: ENGL 1020, ACAD 1100, etc.).

4. How have you utilized UL's services and resources in your online courses? Check all that apply.
    ___ I have not used any UL resources in my online courses.
    ___ assigning a designated (or embedded) librarian
    ___ copying/pasting permanent links to online articles, e-books, etc. for course readings
    ___ uploading PDFs of online articles, e-books, etc. for course readings
    ___ copying/pasting links to Research Guides created by University Libraries
    ___ copying/pasting links/embedding video tutorials created by UL into your online course
    ___ encouraging students to make a research appointment (or research consultation) with a librarian at UL
    ___ encouraging students to use Chat on UL websites if they need assistance with research, citation, etc.
    ___ requesting a virtual library instruction session
    ___ encouraging students to use Interlibrary Loan/Resource Delivery services to obtain materials UL does not own
    ___ encouraging students to contact the Special Collections department at UL to obtain primary resources
    ___ encouraging students to contact the Government Publications department for access to government-issued documents
    ___ placing UL materials on course reserve for students to check out
    ___ encouraging students to contact the Music Library for access to subject-specific resources
    ___ encouraging students to contact the Health Sciences Library for access to subject-specific resources
    ___ providing access to streaming media sites such as Kanopy, MetOpera, etc.
    ___ Other_____

5. Of the UL services and resources used in your online courses, please rank in order from

most useful to least useful. (If you have not used any, check "I have not used any library resources in my online courses" at the top).

___ I have not used any UL resources in my online courses.

___ assigning a designated (or embedded) librarian for your online course(s)

___ copying/pasting permanent links to online articles, e-books, etc. for course readings

___ uploading PDFs of online articles, e-books, etc. for course readings

___ copying/pasting links to Research Guides created by University Libraries

___ copying/pasting links/embedding video tutorials created by UL into your online course

___ encouraging students to make a research appointment (or research consultation) with a librarian at UL

___ encouraging students to use Chat on UL websites if they need assistance with research, citation, etc.

___ requesting a virtual library instruction session

___ encouraging students to use Interlibrary Loan/Resource Delivery services to obtain materials UL does not own

___ encouraging students to contact the Special Collections department at UL to obtain primary resources

___ encouraging students to contact the Government Publications department for access to government-issued documents

___ placing UL materials on course reserve for students to check out

___ encouraging students to contact the Music Library for access to subject-specific resources

___ encouraging students to contact the Health Sciences Library for access to subject-specific resources

___ providing access to streaming media sites such as Kanopy, MetOpera, etc.

___ Other_____

Please explain the reason for your rankings:

6. If you have not used any library resources in your online courses, please elaborate:

7. Is there a service you used that you would not use again? If so, please explain in the box below.

8. How might UL assist you and your students in the future?

___ citing correctly

___ developing key words

___ professional writing

___ academic writing

___ graduate-level writing

___ developing course materials

___ other: _____

9. Since March 2020, has your utilization of UL services increased or decreased during the COVID-19 pandemic?

___ Since the beginning of the pandemic, my use of UL services as increased.
___ Since the beginning of the pandemic, my use of UL services has decreased.
___ A mixture of both. I have used some UL services more, while I have used less of others.
___ My utilization of UL services has not changed.
___Other _____

10. What was the reason for the decrease and/or increase?

11. Do you agree with the following statement?:
As an online instructor, I am satisfied with the support I received from UL during the CO-VID-19 pandemic.
___ Disagree ___ Agree ___ Strongly Agree

12. Do you agree with the following statement?:
As an online instructor, I would have liked more assistance from UL during the COVID-19 pandemic.
__ Disagree ___ Agree ___ Strongly Agree

13. Please elaborate on your answers to questions #12 and #13. UL will use your answers to better serve the University of Memphis community.

14. As an online instructor, what are your recommendations for UL to enhance online services?

15. Is there anything else you would like to add?

Appendix B

1. How long have you been teaching online courses?
2. What student level do you teach online?
3. What courses do you teach online?
4. How have you used UL services before the COVID-19 pandemic?
5. Has this changed at all while you have been teaching exclusively online?
6. Did you begin using a library service during the COVID-19 pandemic? If so, which service?
7. How do you think Libraries services have changed during the pandemic?
8. How did you learn about library services you have used in the past?
9. How can the Libraries increase communication about our services among the online faculty at the University of Memphis?
10. Describe some ways UL can support you in your online courses moving forward.

Appendix C

TABLE 1 Representation of Courses and Subjects		
Subject	**Number of Courses Represented**	**Number of Participants**
Accounting	8	2
Anthropology	7	2
Audiology and Speech Pathology	10	3
Aviation	1	1
Biology	15	4
Child Development and Family Studies	1	1
Composition	2	1
Educational Psychology	9	2
English	1	1
Exercise, Sport, and Movement Sciences	3	1
Finance, Insurance, and Real Estate	3	2
French	3	1
Health Administration	2	1
History	6	2
Honors Forum	1	1
Hospitality and Resort Management	10	1
Management	4	1
Management Information Systems	5	2
Marketing	2	2
Math	9	3
Merchandising	3	1
Political Science	4	3
Professional and Liberal Studies	12	5
Public Health	5	2
Religion	1	1
Social Work	22	7
Sociology	4	1
Sport and Leisure	11	2
Supply Chain Management	8	3
I do not wish to answer		2

Appendix D

- I have not used any UL resources in my online courses.
- assigning a designated (or embedded) librarian
- copying/pasting permanent links to online articles, e-books, etc. for course readings
- uploading PDFs of online articles, e-books, etc. for course readings
- copying/pasting links to Research Guides created by UL
- copying/pasting links/embedding video tutorials created by UL into your online course
- encouraging students to make a research appointment (or research consultation) with a librarian at UL
- encouraging students to use Chat on UL websites if they need assistance with research, citation, etc.
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- placing UL materials on course reserve for students to check out
- encouraging students to contact the Music Library for access to subject-specific resources
- encouraging students to contact the Health Sciences Library for access to subject-specific resources
- providing access to streaming media sites such as Kanopy, MetOpera, etc.
- Other_____

Notes

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