

## **Music Faculty after Pandemic Closures: A Mixed Methods Study of Evolving Resource Preferences and Libraries**

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It is perhaps a cliché at this point to note that COVID-19 has accelerated developments that were already underway in higher education. Music faculty's efforts to deliver course materials through digital means and shifts in use to free and freemium music resources over physical media that had begun in preceding years quickened. These practices unquestionably altered the ways in which faculty leverage the library and its resources in their teaching activities. Libraries have responded to both evolving pedagogical practices and pandemic shutdowns by shifting collection development and access policies. Amidst these changes, both librarians and teaching faculty have faced new avenues for providing and using materials for teaching and learning.

Building on Joe C. Clark, Jonathan Saucedo, and Sheridan Stormes's 2017 research that explored the ways in which university faculty in music, theater, and dance programs used the library for their pedagogical work,<sup>1</sup> the current study provides a longitudinal perspective on how music faculty's practices may have changed. This mixed methods research combines qualitative data from interviews and quantitative data from questionnaires administered at Kent State University, the Eastman School of Music at the University of Rochester, and the University of Minnesota, Twin Cities. The authors began this research by considering how developments brought about by the pandemic may have altered music faculty members' approach to teaching with library materials. In order to investigate these topics, the study employed several research questions: 1) What materials do faculty use in group and individual instruction, and why? 2) What are faculty's preferred sources and formats for teaching content? 3) What is the library's

role in filling instructional content? 4) What obstacles do faculty encounter when using library resources? 5) How did the COVID-19 pandemic impact materials used in teaching? and 6) How do the findings for the faculty compare and contrast to a study focused on student preferences<sup>2</sup> that proceeded concurrently? This investigation was designed to provide readers with current insights on how music faculty have perceived and used both library and non-library resources in the wake of pandemic-related campus closures.

## **LITERATURE REVIEW**

The present study intersects with literature that discusses the evolving format preferences of users and the ways in which the pandemic affected library collections. A number of studies have charted the increasing importance of electronic resources in instruction. The scholarly journal led the way toward acceptance of electronic media,<sup>3</sup> while the ebook, by contrast, has been a site of contestation since the mid-2000s.<sup>4</sup> Distinct disciplines have unique usage patterns, with the arts and humanities maintaining a stronger preference for print materials,<sup>5</sup> though trends seem to have been moving toward digital in the final years of the 2010s.<sup>6</sup>

Another development has been the move toward freely available internet resources, particularly for scores, audio, and video. The International Music Score Library Project (IMSLP), in which contributors can upload scans of public domain works, is the most prominent source of free sheet music.<sup>7</sup> Openly accessible scores published by a scholarly source have also been embraced in academia, indicated by online editions of the complete works of Emmanuel Bach and Mozart.<sup>8</sup> Scholarly groups, such as the Society for Seventeenth-Century Music, have also worked to produce new editions of compositions.<sup>9</sup> Freemium applications such as Spotify have overtaken the CD as preferred media for audio and have challenged library-provided

streaming offerings such as Naxos.<sup>10</sup> YouTube has similarly taken a dominant place in the arena of sound and video.<sup>11</sup>

Literature detailing the pedagogical use of library collections since the beginning of the pandemic indicates an acceleration of trends already underway. Benjamin Walsh and Harjinder Rana identify the services that the University of Toronto Libraries provided in the months following the 2020 lockdowns, including creating digital equivalents of text and audiovisual items, while “selectively digitiz[ing] its collections.”<sup>12</sup> Library patrons were able to utilize the HathiTrust Emergency Temporary Access Service to borrow digital versions of inaccessible print books.<sup>13</sup> Walsh and Rana speculate that the shift toward digital holdings away from print will continue.<sup>14</sup>

A core finding in Erin Rowley’s study of the library needs of University at Buffalo engineering faculty was a desire for increased access to electronic resources to adapt to online learning.<sup>15</sup> In that same study, conducted during the summer of 2020, Rowley noted that reading materials on a computer screen was “not always ideal,” but recognized the potential of Open Education Resources (OER) to enhance the curricular experience of the students. Ithaka S+R’s 2021 survey of US faculty found an increase in the use and creation of open education resources and a decrease in the importance of the print monograph.<sup>16</sup> Disciplinary differences were key, though, as nearly 80 percent of humanities faculty surveyed strongly agreed that physical books were very important in their research and teaching, a percentage that was higher than in 2015. As to reasons for its enduring popularity, more than 80 percent of respondents to Ithaka S+R’s 2021 survey said it was easier to read print materials cover to cover and in depth, while about 70 percent noted searching for a particular topic was easier in digital than print.<sup>17</sup>

A longitudinal study by Jung Mi Scoulas and Sandra L. De Groote at the University of Illinois-Chicago seems to push against the trend toward electronic resources; they found that the importance of the library for teaching faculty had decreased in all categories in spring 2022 as compared with 2017, with the exception of assigning readings available in print through the library.<sup>18</sup> This was one of the lowest rated categories of importance, but ranked higher among the arts and humanities disciplines when compared to the sciences and social sciences. The study did find that fewer faculty referred students to a liaison librarian or required them to use library resources in graded assignments as compared to 2017, even after an uptick in 2019. In terms of their research needs, arts and humanities faculty ranked the importance of print books as 8.01 on a scale of 1-9, outpacing their rating of ebooks (7.78) and exceeded in importance only by databases, online journals, and interlibrary loan (8.69, 8.34, and 8.33). Scoulas and De Groote speculated that “COVID-19 required faculty members to focus more on adjusting their courses to an online format, which potentially results in a lack of attention to referring students to a liaison librarian or creating assignments that required library resources”; at the same time, they found that “library resources remain valued” by the faculty.<sup>19</sup> More than specific resources, however, information literacy instruction was the most important service provided.<sup>20</sup>

Another longitudinal study conducted at Sam Houston State University similarly found that while the reported usage of ebooks had increased in 2021 compared to 2011 (64 percent compared to 38 percent), preferences remained largely where they had been in the earlier decade and did not significantly differ based on a faculty member’s discipline.<sup>21</sup> Information retention, eye fatigue, the lack of tactile connection, difficulty navigating the interfaces, and annotation limitations were some significant reasons given for aversion to electronic monographs. Most respondents (71 percent) reported that their use of ebooks stayed about the same since the

pandemic, with 19 percent of faculty saying their use increased at least somewhat and with less than 4 percent saying it decreased. The importance of faculty preferences was particularly notable, with 60 percent of graduate students who did not prefer ebooks reporting that they would be more likely to use them if a professor made that recommendation.

A pair of studies conducted in 2016 and 2019 was much closer to our own in their examination of music faculty.<sup>22</sup> A. Carey Huddlestun found that the preference for print books over ebooks had grown slightly from 68 percent to 72 percent. Preference for print music had declined from 77 percent to 72 percent. Other formats were much more highly valued in digital rather than physical form with 83 percent selecting e-journals, 94 percent web-based reference, 83 percent streaming music, and 100 percent web-based video in 2019. YouTube and Spotify emerged as the dominant platforms for audio and video.

## **BACKGROUND**

Music librarians at Kent State University, the University of Minnesota, and the Eastman School of Music at the University of Rochester conducted this study. The degrees these institutions offer are similar, but each university is unique in its setting, demographics, academic focus, and reaction to the pandemic.

Located in Northeast Ohio, Kent State University is a suburban public R1 university. At the time this research was conducted, the main university campus had a total enrollment of just over 25,000 and a School of Music enrollment of 131 undergraduates, 110 master's students, and 20 doctoral students. There were 20 tenured/tenure track, 14 non-tenure track, and 51 adjunct faculty members. Fifty-seven percent of the undergraduates were majors in Music Education. Residential master's programs included ethnomusicology, composition, theory, conducting, and performance. The doctoral programs were in music education and theory-composition.

With over 50,000 students enrolled at campuses in Minneapolis and St. Paul, the University of Minnesota, Twin Cities is the flagship institution of the University of Minnesota system.<sup>23</sup> Approximately 170 undergraduate and 235 graduate students attended the School of Music during the 2022-2023 academic year. During this time, 44 full-time faculty and 24 affiliate and teaching faculty oversaw undergraduate, graduate, and postgraduate degree programs in instrumental studies, vocal arts, jazz, music education, theory, musicology/ethnomusicology, music therapy, creative studies and media, and world music.

More than 12,000 students attend the University of Rochester, a highly ranked, private non-profit institution in western New York State. At the Eastman School of Music, approximately 500 undergraduates and 400 graduates were taught by 110 full-time, resident faculty at the time the data for this study were gathered.<sup>24</sup> Bachelors, masters, and doctoral degrees are offered in strings, brass, percussion, keyboard, winds, voice, theory, musicology, conducting, composition, and music education.

Pandemic reactions differed among the three institutions, ranging from the complete closure of branch library locations between March 2020 and August 2021 to the tightening and relaxing of library policies in response to vacillating campus restrictions as cases surged. By September 2022, when the study began, all research sites had largely returned to 2019 practices, with no masking requirements and no interruptions to face-to-face instruction.

## **METHODOLOGY**

This mixed methods study was approved by the Institutional Review Boards at all three universities, and it employed interviews and an online survey. The authors began instrument design by considering the 2017 survey and interview questions,<sup>25</sup> but focused on the impact of

the pandemic on teaching and learning resources. The research team developed the survey and interview questions (see Appendices A and B, respectively) over a four-month period.

All music faculty at the three participating institutions were invited to take the survey. The authors distributed survey details and links via email and, in the case of Eastman, also through their campus newsletter. The survey was deployed using Qualtrics through Kent State University. It was tested by the authors and others for clarity and remained open to music faculty during October and November 2022. Each institution had a unique URL marker to identify affiliation. Ninety-six surveys were completed; results were scrutinized, and 17 incomplete and obvious bot-complete entries deleted, leaving 79 valid survey responses.<sup>26</sup> Data were then imported into IBM SPSS Statistics 28 for analysis, with various results later exported into Microsoft Excel for further examination. Percentages were rounded to the nearest whole number.

At the completion of the survey, respondents were offered the opportunity to participate in semi-structured, person-centered interviews with the author at their corresponding institution. In these sessions, the interview facilitator asked questions from a predetermined list but followed additional lines of inquiry when prompted by participants. Incentives to participate in the surveys and interviews varied between institutions. Authors interviewed 28 faculty<sup>27</sup> between October and December 2022, employing open-ended questions developed in conjunction with the faculty survey.<sup>28</sup> Interviews were conducted in person or online via Microsoft Teams or Zoom after the close of the survey window and were recorded; these recordings were transcribed using software built into the respective video conferencing platforms, and the accuracy of the transcriptions was verified by the authors.

The authors chose a realist epistemological approach centered on the participants' lived experiences as a lens through which to analyze the qualitative data gathered for this interpretivist

study.<sup>29</sup> During the process of conducting a reflexive thematic analysis, we used an iterative, inductive approach that involved axial coding.<sup>30</sup> Applying this methodology, we created a thematic map that illustrates the meaning-based patterns identified through the process of coding the interview data.<sup>31</sup>

## **RESULTS**

We present a concise summary of the qualitative results gathered from interview transcripts in this section,<sup>32</sup> followed by an examination of the survey data. The analysis of survey results also includes quotes and references to the various themes that emerged from the interviews in order to further illustrate participants' opinions and preferences. The results were analyzed in aggregate, as the authors found no significant differences in the quantitative or qualitative data gathered from each of the participating institutions.

### **Thematic Analysis Overview**

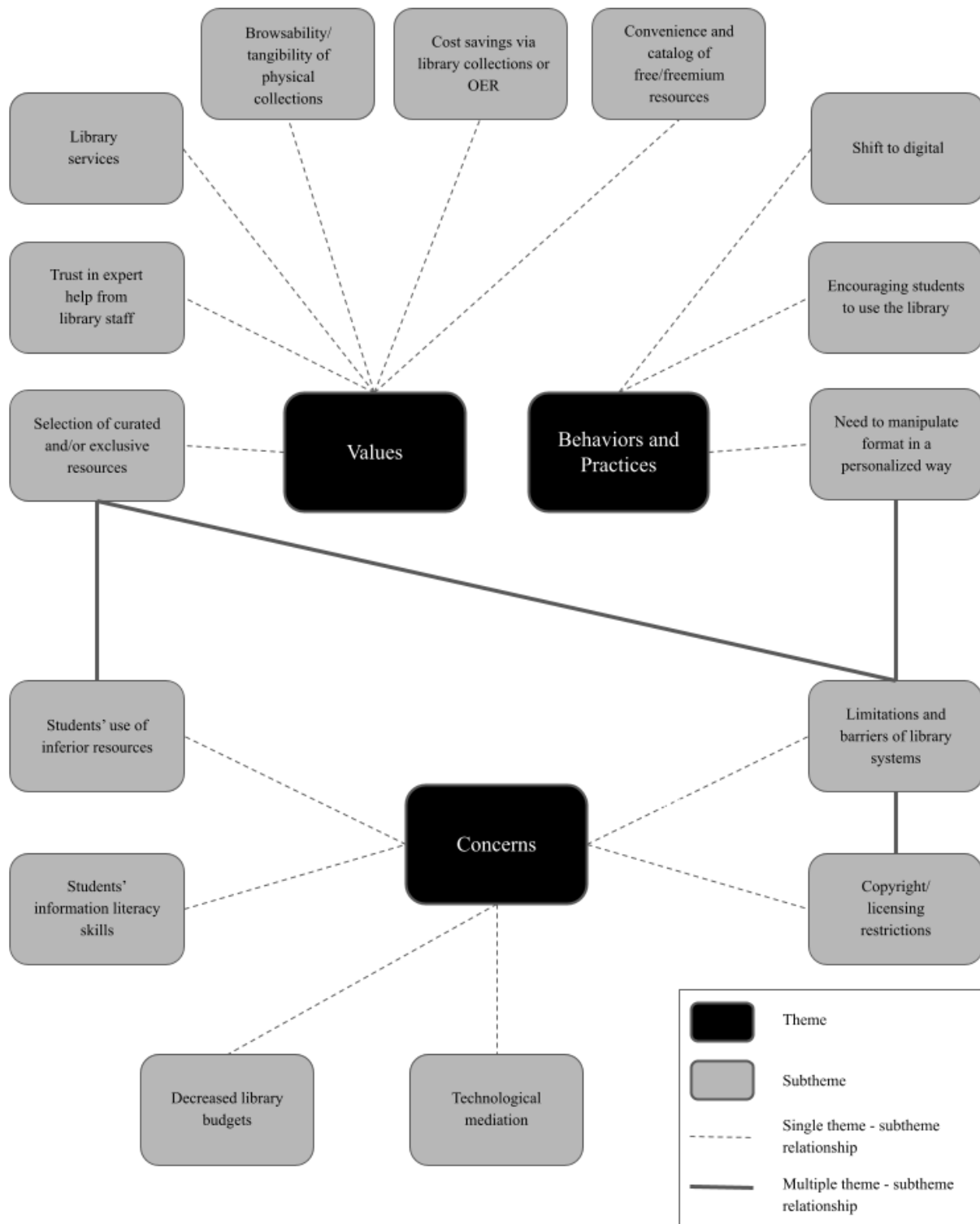
The interviewed faculty members represented a range of disciplines, categorized here as applied areas (including cello, clarinet, conducting, ensembles, oboe, horn, organ, piano, violin, and voice) and academic areas (ethnomusicology, global creative studies, music education, musicology, and theory). Twelve applied and sixteen academic faculty participated. Six participants were from Kent State, 6 were from the University of Minnesota, and 16 were from Eastman.

Faculty were invited to share their opinions on the ways in which they interacted with library holdings and other resources in their teaching, as well as their observations on students' experiences with using library materials. Analysis of this qualitative data yielded a set of three broad themes that transcended material types: Theme 1: Values; Theme 2: Behaviors and



practices; and Theme 3: Concerns. The three themes (illustrated in figure 1) are underscored by related subthemes.<sup>33</sup> The relationships between themes and subthemes are represented in the thematic map by dotted lines. Several sub-themes bore relationships to more than one theme or subtheme; these connections are represented in figure 1 by solid lines.

Figure 1: Thematic map of themes and subthemes identified in qualitative data



Overall, faculty communicated that they valued their library and its resources. A number of participants noted the particular esteem in which they held their library's collections of print

score editions, digital periodicals, recordings and their liner notes, special collections, and other curated or “exclusive” resources (i.e., unavailable for free online) accessible through the library. The concept of trust percolated through discussions of the curated, high-quality collections provided for free by the library, and this idea was especially evident in participants’ mentions of their faith in the expertise and services offered by library staff. Several highly prized library services included processes to submit requests for purchases, interlibrary loans, and digital course reserves. In addition to focusing on participants’ interest in library materials, Theme 1: Values was also characterized by discussions about non-library resources, which included examples ranged from the cost savings offered by use of open educational resources to the convenience and breadth of catalogs offered by free and freemium platforms (e.g., YouTube, IMSLP).

Faculty often mentioned the convenience of using free and freemium platforms in their teaching, but many participants noted that they encouraged students to take advantage of library collections and services.<sup>34</sup> Several interviewees reported that they perceived students as using the library less frequently than they would hope or expect, or even exhibiting resistance to utilizing the library, and outlined their concerns about what they view as a decrease in students’ information literacy skills from past years. Many interviewees expressed concerns about students’ use of inferior resources available through free internet platforms, compared these materials unfavorably to the materials found in their library’s collection, and worried over what they interpreted as indifference or a lack of critical thinking in students’ choice of score editions or recordings (Theme 1: Values; Theme 3: Concerns). These participants speculated that students’ use of inferior resources may stem from their lack of research knowledge and skills.

Faculty participants also shared anecdotes of students feeling frustrated or overwhelmed when using the library, and reported that they sometimes felt similarly themselves. Some interviewees speculated that student exasperation could stem from limitations and barriers created by the design of library and vendor systems. Recurring examples, frequently drawn from faculty members' own experiences, were difficulties encountered when searching for music materials in library catalogs and on library shelves. Participants also expressed confusion about where to click and how to use built-in features when interacting with database interfaces and streaming platforms accessed via their library. Additionally, a number of participants described feeling averse to annotating library scores but articulated that this limitation can hamper the ways in which they interact with these materials (Theme 2: Behaviors and Practices; Theme 3: Concerns).

Most faculty interviewed described a general shift toward use of born-digital and digitized items in their teaching and acknowledged students' expectation for digital resources, though practices and sentiments varied among content formats. Some of the reasons given for the shift to digital resources included 1) interest in streamlining organization and facilitating access for both students and themselves, 2) providing cost savings for students through use of library collections or open educational resources, and 3) creating a means to manipulate and annotate materials in a personalized way using items they "own" in the form of downloaded or scanned materials. While the authors did not ask specifically about tablet use, faculty offered opinions on using tablets in their teaching and performing activities. Some articulated benefits, including 1) the expediency of creating, saving, and sharing annotations without the need to write on library materials, 2) the convenience of having instant access to a large catalog of resources while in lessons or traveling, 3) the ease with which teachers can provide their students access to quality

editions, and 4) the utility tablets offer when performing in low light. Other participants recognized that many students have embraced tablet use in their studies and performance activities, but they expressed hesitation about introducing technological mediation in their pedagogical work. Despite an overall shift to digital, many interviewees expressed a preference for physical resources because of their tangibility, browsability, and reliability, and stated that they highly value library collections of print score editions for comparison purposes.

Faculty communicated their concerns about cuts to crucial library budgets that have resulted in decreased funding for library hours, staffing, collections, and spaces. Other concerns centered on limitations and barriers presented by library systems, most notably the acquisition of new music materials (this interest in libraries collecting materials for contemporary compositions also connected to Theme 1: Values). Several faculty participants noted that they wished their library could curate stronger collections of performing materials for contemporary music, but acknowledged that licensing restrictions and a lack of library infrastructure to support self-published, born-digital scores—the medium through which much of this repertoire is made available by its composers—presented a barrier to this work (this data point represents an intersection between Theme 1: Values - Selection of curated and/or exclusive resources, Theme 3: Concerns - Limitations and barriers of library systems, and Theme 3: Concerns - Copyright/licensing restrictions). Examples of concerns about technological mediation and barriers to personalized manipulation included experiencing trouble with creating and sharing playlists and being hindered by download limits (representing further connections between Theme 1: Values - Selection of curated and/or exclusive resources and Theme 3: Concerns - Limitations and barriers of library systems).

## Survey

### *Demographics*

Overall, 30 percent of the combined faculty at all three institutions completed the survey (22 percent of Kent State faculty, n=19; 31 percent of faculty at the University of Minnesota, n=21; and 35 percent of Eastman's faculty, n=39). Of the 79 faculty who completed the survey, most were in applied programs (35 percent, n=28), followed by music history or ethnomusicology (29 percent, n=23) and music education fields (16 percent, n=13). Other disciplines represented included theory, composition, and music therapy. Sixty-three percent (n=50) of respondents were tenured or on the tenure track, and 19 percent (n=15) were non-tenure track. Eleven percent (n=9) were adjunct faculty and 5 percent (n=4) were graduate assistants or fellows. Most survey respondents were over 40 years old; 28 percent (n=22) indicated they were between 41-50; 35 percent (n=28) were between 51-60; 22 percent (n=17) were 61+. Two-thirds (67 percent, n=53) reported having 12+ years of experience teaching at the collegiate level.

### *What Materials Faculty Require for Students*

When asked about what materials they typically required in their classes and lessons before, during, and after pandemic closures, survey respondents reported using most types of resources at similar rates before and after pandemic closures (see table 1). There were, however, some notable exceptions; use of audio and video over this time period increased 6 percent and 15 percent, respectively, while use of book content was down 7 percent. Most interviewees also mentioned a shift to using born-digital or digitized resources in their pedagogical work.

Table 1: Responses to “When teaching, what materials do you typically require students to use?”

	<b>Before pandemic closures (n=77)</b>	<b>During closures (n=76)</b>	<b>Fall 2022 (n=78)</b>
Textbooks	64 percent (n=49)	57 percent (n=43)	64 percent (n=50)
Audio	79 percent (n=61)	84 percent (n=64)	85 percent (n=66)
Periodicals	68 percent (n=52)	64 percent (n=49)	69 percent (n=54)
Book content	81 percent (n=62)	74 percent (n=56)	74 percent (n=58)
Scores	69 percent (n=53)	67 percent (n=51)	69 percent (n=54)
Video	58 percent (n=45)	78 percent (n=59)	73 percent (n=57)
Reference materials	44 percent (n=34)	38 percent (n=29)	47 percent (n=37)

In a comparison of faculty’s reported behaviors prior to 2020 campus closures and in fall 2022, the rates at which they required use of most materials originating from the library decreased (see table 2). Though survey respondents did report an overall increase in use of both audio and video in their teaching, their utilization of library-provided audio and video dropped sharply during pandemic closures and did not rebound to pre-pandemic levels.

Table 2: Responses to “Of [the materials you typically require students to use], which come/came through the library? Check all that apply.”<sup>35</sup>

	<b>Before pandemic closures (n=77)</b>	<b>During closures (n=76)</b>	<b>Fall 2022 (n=78)</b>
Textbooks	31 percent (n=15)	37 percent (n=16)	34 percent (n=17)
Audio	66 percent (n=40)	41 percent (n=26)	52 percent (n=34)
Periodicals	88 percent (n=46)	86 percent (n=42)	85 percent (n=46)
Book content	85 percent (n=53)	73 percent (n=41)	83 percent (n=48)
Scores	77 percent (n=41)	41 percent (n=21)	65 percent (n=35)
Video	60 percent (n=27)	32 percent (n=19)	42 percent (n=24)
Reference materials	88 percent (n=30)	76 percent (n=22)	76 percent (n=28)

When interviewees were asked whether the pandemic affected how they teach using library resources, some shared their continued appreciation for the browsability and tangibility of physical library collections, and lauded the library for making available resources that are not freely accessible online. Others, however, indicated that their use of the library has decreased in recent years, with one respondent stating: "Even for me, my library usage is not increasing, let's put it that way. It's probably slowly decreasing, I think. For the students very much so." Some interviewees described encountering long-standing issues with library systems, including confusing and slow search experiences in library databases, inflexible interfaces and tools for creating playlists, and catalogs that do not accommodate searching for music materials like



scores and recordings. Mentions of decreased library use were also frequently framed within the context of a rise in use of freely available digital resources.

Faculty reported requiring students to use several types of materials that did not come from their library (see table 3). Personal or borrowed materials were cited as being required at high rates, which is supported by the study’s qualitative findings; a number of faculty interviewed shared that they require students to build their own personal libraries of scores and books for future use. Use of non-peer reviewed/crowdsourced internet resources and open authoritative educational internet resources increased steadily throughout the period of time under review.

Table 3: Responses to “When teaching courses/lessons, what materials do you typically require students to use that are NOT from the library? Check all that apply; leaving blank indicates non-use.”

	<b>Before pandemic closures (n=77)</b>	<b>During closures (n=76)</b>	<b>Fall 2022 (n=78)</b>
Non-peer reviewed crowdsourced internet resources	65 percent (n=50)	74 percent (n=56)	77 percent (n=60)
Open authoritative educational internet resources	25 percent (n=19)	29 percent (n=22)	36 percent (n=28)
Subscription-based media	19 percent (n=15)	28 percent (n=21)	26 percent (n=20)
Personal or borrowed materials	71 percent (n=55)	64 percent (n=49)	71 percent (n=55)
Other	8 percent (n=6)	3 percent (n=2)	3 percent (n=2)

In response to the survey question “Has the pandemic pushed you to incorporate more open access resources in your instruction,” almost two-thirds (63 percent, n=45) of participants replied in the affirmative, confirming a shift away from institution-exclusive resources. In interviews, faculty frequently mentioned using non-peer reviewed or crowdsourced internet resources in their teaching activities; one described these materials as being like “cheese or chocolate, take your pick, because they're just too delicious to ignore.” Many respondents reported using free and freemium platforms, most often YouTube, as a source for video and audio content. These study participants often cited YouTube’s convenience, the breadth and depth of its catalog, and the engaging nature of audio when delivered with a video component as reasons for using this resource.<sup>36</sup> As one interviewee stated, “I’m guilty of this for better, for worse. I use YouTube every day and almost exclusively in lectures, because I can open all those video tabs before class and then just quickly [play them]—because the students lose interest very quickly. As you know, they need to be entertained a little bit.” For others, YouTube presented an easy fix in instances when the library was inaccessible. As one respondent noted, “Because we were encouraged to not be in places, it started to become more habitual to, instead of run[ning] down to the library and grab[bing] something, to just look and see what was online . . . to access videos or YouTube recordings.”

These qualitative findings are supported by the rate at which survey respondents reported using YouTube, which emerged as a clear favorite among free and freemium resources. There was not a notable difference in reported usage of Spotify or other audio streaming services throughout the time period covered by the study, and these resources were used by faculty at much lower rates than YouTube (see table 4).

Table 4: Responses to “Which internet resources do you use in your teaching? Choose all that apply; leaving blank indicates non-use.”

	<b>Before pandemic closures (n=77)</b>	<b>During closures (n=76)</b>	<b>Fall 2022 (n=78)</b>
YouTube	86 percent (n=66)	93 percent (n=71)	94 percent (n=73)
Spotify or other audio streaming services	47 percent (n=36)	46 percent (n=35)	44 percent (n=34)
IMSLP or other score sites	66 percent (n=51)	71 percent (n=54)	71 percent (n=55)
Wikipedia or other crowd-sourced websites	44 percent (n=34)	43 percent (n=33)	45 percent (n=35)
Blog posts (non-wiki)	30 percent (n=23)	36 percent (n=27)	35 percent (n=27)
Other	3 percent (n=2)	4 percent (n=3)	5 percent (n=4)

When faculty were asked about the factors that prevented them from using library resources in their pedagogical work, the most cited reason was “I have my teaching materials and/or they are available elsewhere” (see table 5). Several of the options offered as possible answers to this question were selected by 15 percent to 23 percent of participants: “Students struggle using the library,” “The library doesn’t have the materials that I need,” “I don’t have enough time to use the library,” and “I don’t know what the library offers or has available.” Only four survey respondents cited “Using library resources is too complicated for me” as a primary reason for not using library resources in instruction.

Table 5: Responses to “What factors keep you from using (more) library resources in teaching?”

I have my teaching materials and/or they are available elsewhere	49 percent, n=39
Students struggle using the library	23 percent, n=18
The library doesn't have the materials that I need	20 percent, n=16
I don't have enough time to use the library/Inconvenience	18 percent; n=14
I don't know what the library offers or has available	15 percent, n=12
Using library resources is too complicated for me	5 percent; n=4

### ***What Faculty Want Libraries to Buy***

Respondents were supplied with the resources listed in table 6 and asked which should be prioritized for future purchase (indicated by percentages). They were then asked to rank their top four choices from their previous selections. Faculty indicated that they find digital resources most desirable. Six of the top seven resource types ranked highest were electronic, and faculty displayed a clear preference for digital formats for all content types. For ranked order, the lower the mean (M) the higher respondents who selected that resource as a priority rated it. The standard deviation (SD) indicates the spread of those responses.

Table 6: Responses to “What material should the library prioritize for future purchases?” (ranked top four).

<b>Formats in ranked order</b>	<b>Percentage that ranked item with mean (M) and standard deviation (SD)</b>
Digital Scores/Score DBs	49 percent (M=2.29, SD=1.23)
Digital Reference DBs	49 percent (M=2.5, SD=1.03)
Digital Periodical DBs	46 percent (M=2.17, SD=1.13)
Ebooks	42 percent (M=2.27, SD=.94)
Digital audio music DBs	38 percent (M=2.77, SD=1.1)
Print scores	37 percent (M=2.21, SD=1.15)
Digital video DBs	36 percent (M=2.61, SD=.99)
Print books	29 percent (M=2.26, SD=1.14)
Print journals	10 percent (M=3, SD=.93)
CDs	9 percent (M=2.71, SD=1.38)
Print reference materials	8 percent (M=2.93, SD=1.33)
DVDs	6 percent (M=2.6, SD=1.14)

### ***Faculty’s Use of Library Services***

While perceptions of library services were tangential to this study, these elements frequently underpin faculty’s use of collections. Data gathered through the survey and interviews indicate that faculty’s use of library services had mostly rebounded to or exceeded pre-pandemic

levels. Survey data in table 7 indicate that 7 percent more faculty reported using library collections in fall 2022 compared to before the pandemic. Faculty’s utilization of a number of library services remained fairly steady, including their use of streaming audio and video made available through the library and the option to recommend library purchases.

Table 7: Responses to “I typically use the following library services to support my teaching.”

	<b>Before pandemic closures (n= 77)</b>	<b>During closures (n=76)</b>	<b>Fall 2022 (n=78)</b>
Collections from our or other libraries	75 percent (n=58)	64 percent (n=49)	82 percent (n=64)
Physical reserves	71 percent (n=55)	36 percent (n=27)	58 percent (n=45)
Electronic reserves	48 percent (n=37)	55 percent (n=42)	51 percent (n=40)
Playlists and direct access to audio databases	38 percent (n=29)	36 percent (n=27)	35 percent (n=27)
Direct video access	27 percent (n=21)	29 percent (n=22)	29 percent (n=23)
Class instruction	23 percent (n=18)	9 percent (n=7)	18 percent (n=14)
Short library intro (<15 minutes)	19 percent (n=15)	7 percent (n=5)	15 percent (n=12)
I recommend purchases	43 percent (n=33)	37 percent (n=28)	42 percent (n=33)

Physical reserves represented the greatest decrease in use of library services. One of the institutions included in this study has discontinued the practice, and some faculty expressed

disappointment at not having this option. As a participant noted: “Without physical reserves, I cannot put complete books on reserve for students to browse when writing a paper.” Another demanded a “return to physical reserves. When an entire class is writing on the same topic, the lack of a centralized place for them to consult relevant materials means that one student is able to check out all the books on the topic, leaving the others to fend for themselves or just use whatever they can find online.” Seventy-one percent (n=55) of survey takers reported utilizing physical reserves prior to the pandemic, and while this number dropped sharply during campus closures (36 percent [n=27]),<sup>37</sup> it rebounded to 58 percent (n=45) during fall 2022.

Faculty indicated that they used electronic reserves slightly more in fall 2022 than they did prior to pandemic-related campus closures. Faculty were also asked on the survey whether they used their content management system (CMS; e.g., Blackboard and/or Canvas) before the pandemic, during virtual teaching/campus closures, and during fall 2022. The percentage of active CMS use went up 5 percent from before the pandemic (71 percent, n=56) to 76 percent (n=60) in fall 2022. A number of faculty mentioned the benefits of using their campus’s CMS to share both library e-reserves and links to non-library resources with their students. As one interviewee put it: “I use library reserves more effectively than I did before, because I don't have to re-enter everything [into Canvas] in the ways that we used to have to do. The fact that I can keep a list, and it's like ‘Here's what you did last year’ . . . those adaptations that the library folks made to make the materials more accessible online were also really, really helpful.” The topic of utilizing a CMS for sharing links to recordings also arose in the faculty interviews: “I'm so grateful that Canvas allows YouTube links because it didn't initially, and that's been incredibly helpful . . . I do have [the students] do a learning management system project where they have to create lessons in an online format, and that's where having the access to all of those other

resources [like Naxos] is very helpful.” Another noted how “Blackboard has ‘taken over’ how I share materials . . . This means many fewer trips to the library to access its collections.”

### *Free Text Responses*

The survey offered an opportunity for participants to include additional thoughts on how the library can help with their teaching. The 37 responses addressed a variety of topics, mostly regarding collections (n=12), instruction (n=9), and spaces (n=7). Others touched on the responsibility that faculty have in knowing about the library and encouraging its use among students (n=4) and frustrations with the library website (n=2). A desire for more was a consistent theme: more digital and more print books, scores, and journals; more instruction from librarians; and more hours of access to the building. There were concerns that digital accessibility discouraged the use of the library and that electronic resources were at risk of disappearing in comparison to their print counterparts. There was acknowledgment of a shared responsibility that advocacy for the library did not fall on librarians alone; yet there was also criticism that communication of library policies and procedures was not always clear.

## **DISCUSSION**

The qualitative and quantitative findings of this study are significant for a number of reasons. Taken together, the results of the survey and interviews indicate that faculty valued their library, and that they continued to view libraries as a vital component of teaching, learning, research, and performing activities. Though some changes to the way faculty use resources in their teaching were already in progress prior to 2020, pandemic-related disruptions appeared to have hastened other shifts. Results showed that the move toward use of digital resources was accelerating, and interviewees’ mentions of using digital resources in their teaching were conspicuous. Faculty also reported using less of certain types of content from the library, but



using more of this content from non-library sources, mostly video and audio from YouTube. In fall 2022, faculty used the same amount or more scores, videos, audio, and reference materials as before pandemic closures, but their use of these materials from the library had decreased notably and they required more non-library internet sources in their courses than before.

When considering faculty's use of several types of library resources, a number of findings stood out. While required score usage remained steady throughout the time period investigated for this study, required use of library scores dropped sharply during pandemic closures. This is unsurprising, as library locations were inaccessible during that time and many faculty reported preferring print scores to digital surrogates. Though use of library scores rebounded, it had not reached pre-pandemic levels at the time data for this study were gathered (see table 2). A number of faculty who participated in this study did report using the International Music Score Library Project (IMSLP) in their teaching, and use of this resource increased during pandemic closures and remained steady after the return to in-person teaching (see table 3). There was, however, a note of hesitancy; one participant shared that "We are very careful about IMSLP, because so many of the editions are not good."

Though required usage of reference materials had consistently been low (see table 1), most of the reference materials faculty were using came from library sources (see table 2). A number of faculty indicated that they used Wikipedia or other crowd-sourced websites, as well as non-wiki blogs, in their teaching. These numbers, however, consistently remained in the 30-45 percent range of survey respondents across the time period investigated in this study (see table 3).

This study found that faculty were concerned about students' lack of research skills, and the results also showed that less than 20 percent of faculty were incorporating library instruction

into their courses. The use of non-library resources, however, does not necessarily mean that librarians need to be excluded from music pedagogy. Information literacy skills are especially vital when navigating YouTube, IMSLP, and Wikipedia, and music librarians occupy a key role in sharing relevant strategies related to this topic. It is possible that faculty expect that bibliographic instruction occurs elsewhere besides the library, not necessarily in each faculty member's course or even a majority of them, but in certain and specific settings (e.g., a music bibliography or writing class). Indeed, many of the respondents hailed from performance disciplines, and they may not associate library instruction with their private lessons or studio classes. It is unclear from the data whether faculty recognized that library instruction need not be limited to discussion of materials provided by the library, but it is likely that there is an opportunity to spread awareness of instruction services and librarian expertise in this area.

In line with the growing prevalence of digital resources, a number of faculty interviewees mentioned an increase in use of tablet computers by students and colleagues. Most faculty interviewees who indicated that they do not like to use tablets in performance did not elaborate on their reasoning. Faculty expressed additional concerns about using tablets for pedagogical activities. One faculty member communicated their apprehension about students using digital scores and tablet computers for memorization work, stating, "I find that when they learn it on the iPad, they have more trouble memorizing . . . somehow the physical aspect of it just often will help the music gel faster." Another participant conveyed that for "students who insist on learning their music [on an iPad]—and I don't stop them—it takes a lot longer to get something done in the lesson, whereas with the kids who just hand me a part, I can just scribble something and I'm done very easily." Despite this overall shift to digital, however, many faculty interviewees voiced a preference for physical resources because of their tangibility, browsability, and

reliability, and stated that they highly value library collections of print score editions for comparison purposes.

### **Faculty and Student Studies Compared**

As this survey and interviews were being administered, the authors also conducted a similar mixed-methods study to investigate the format preferences and reported usage of library and non-library materials by the student populations at the three institutions.<sup>38</sup> A consideration of the two investigations reveals both similarities and contrasts in the ways that faculty and students perceive and use the library. Participants in both the faculty and student studies articulated a need to manipulate materials they use for teaching, learning, research, and performance in a personalized way, and members of both groups mentioned an interest in annotating scores. Contributors in each group had concerns about violating copyright, and both faculty and students reported that they appreciated the cost savings that using library materials offers. Open access and open educational resources had also gained mindshare with both faculty and students since the pandemic, with several faculty interviewees noting interest in adopting OA/OER resources in their future teaching activities.

Illustrating a theme that was consistent across the two studies, faculty and students indicated feeling trust in and respect for library staff's expertise in building collections and providing bibliographic instruction. Qualitative data from both studies also communicated participants' strong appreciation for their institution's selection of curated and exclusive resources that are not freely available online. They pointed to their library's collections of print scores and recording liner notes as valuable resources, and many called attention to the ease and speed of access afforded by browsable print score collections. Both populations also mentioned the limitations and barriers of library systems, providing similar examples of stumbling blocks

like a lack of library access to contemporary scores and confusing search experiences in online library resources and physical collections.

Other areas of confluence between faculty and student data were undergirded by slightly different perspectives. Both faculty and students appreciated the convenience of free/freemium platforms like YouTube, but faculty noted that the catalog of these resources was the major driver of their interest while students highlighted the ease and speed of access these tools' interfaces afforded them. Faculty articulated concerns about students' information literacy skills, what they saw as a lack of motivation to use the library, and what they feared was a lack of student concern about the quality of the resources they use. While students did share that they occasionally felt overwhelmed when using the library, could be hesitant to ask for help, and sometimes had trouble searching for and locating resources in library spaces and digital resources, it was clear that the quality of the sources they use mattered to them.<sup>39</sup> This discrepancy may be explained by the selection bias for the student focus groups; perhaps those self-selected respondents had a higher awareness of the importance of sources when compared to the typical student or the type of underperforming pupil that tends to cause the most consternation among professors.

In interviews and focus groups, both faculty and students brought up concerns about technological mediation in their use of library and non-library materials. Students often mentioned experiencing and worrying about screen fatigue, and it is noteworthy that this topic did not arise in faculty interviews. Faculty alluded to concerns about loss of access to digital resources due to licensing changes, experiencing issues with creating and sharing playlists, and being stymied by download restrictions—none of which emerged as prominent issues for student

participants. Both groups discussed use of tablets in performance, and specifically cited worries about equipment malfunctions.

### Faculty in 2017 and 2022

Several comparisons with faculty data collected in 2017 by librarians at Kent State, Rutgers, and Butler Universities were noteworthy, taken together with the important caveats that two of the three institutions in the study differ from the current one and the number of respondents in 2017 (n=39) was quite a bit smaller compared to 2022 (n=79).<sup>40</sup> Responses to questions asked in 2017 and 2022 about what materials faculty require in their classes and lessons indicated that textbook and score use dipped slightly (7 percent and 2 percent, respectively), use of audio was basically flat (rising 1 percent), and use of all other content rose (see table 8). Faculty reported periodical use to be up by 14 percent, while video rose a considerable 20 percent and use of books rose 29 percent. It seems that practices during closures may have had durable impacts on what content faculty use in their teaching.

Table 8: Comparison of 2017 and 2022 music faculty responses to “When teaching, what materials do you typically require students to use?”

	<b>Fall 2017 (n=38)</b>	<b>Fall 2022 (n=78)</b>
Textbooks	71 percent (n=27)	64 percent (n=50)
Audio	84 percent (n=32)	85 percent (n=66)
Periodicals	55 percent (n=21)	69 percent (n=54)
Book content	45 percent (n=17)	74 percent (n=58)

Scores	71 percent (n=27)	69 percent (n=54)
Video	53 percent (n=20)	73 percent (n=57)
Reference materials	42 percent (n=16)	47 percent (n=37)

While faculty indicated that they use more of most types of content in their teaching, their preferences for future library purchases largely shifted away from physical materials between 2017 and 2022. As illustrated in table 9, prioritization of print books, streaming audio databases, and DVDs have dropped the most sharply, with faculty surveyed in 2022 also ranking lower their need for new library purchases of print journals, CDs, electronic and print reference databases, print scores, and streaming video databases as compared with 2017. Interest in library acquisitions of digital journals stayed steady, while prioritization of score databases and ebooks rose by 5 and 13 percent, respectively. Overall, this indicates a growing appetite for digital resources, with physical resources taking less precedence than in 2017.

Table 9: Comparison between 2017 and 2022 music faculty responses to “What material should the library prioritize for future purchases?” (ranked order); includes percentage of respondents that ranked item with mean (M) and standard deviation (SD).

Formats in ranked order	Fall 2017	Fall 2022
Streaming audio databases	63 percent (M=3.27, SD=1.59)	38 percent (M=2.77, SD=1.1)
Electronic reference databases	63 percent (M=3.81, SD=2.48)	49 percent (M=2.5, SD=1.03)
Print books	61 percent (M=3.52, SD=2.08)	29 percent (M=2.26, SD=1.14)

Print scores	51 percent (M=2.62, SD=2.16)	37 percent (M=2.21, SD=1.15)
Electronic journal databases	46 percent (M=2.26, SD=1.52)	46 percent (M=2.17, SD=1.13)
Score databases	44 percent (M=3.89, SD=2.65)	49 percent (M=2.29, SD=1.23)
Streaming video databases	41 percent (M=3.88, SD=1.32)	36 percent (M=2.61, SD=.99)
Ebooks	29 percent (M=4.25, SD=1.77)	42 percent (M=2.27, SD=.94)
Print journals	27 percent (M=3.91, SD=1.7)	10 percent (M=3, SD=.93)
DVDs	27 percent (M=4.73, SD=1.68)	6 percent (M=2.6, SD=1.14)
CDs	24 percent (M=4.3, SD=2.16)	9 percent (M=2.71, SD=1.38)
Print reference materials	17 percent (M=4.86, SD=2.27)	8 percent (M=2.93, SD=1.33)

Though institutions included in the 2017 and 2022 studies differed, a comparison of music faculty’s answers to the question “What factors keep you from using (more) library resources in teaching?” reveal both positive and negative changes (see table 10). In the five years between the collection of these data, there was an alarming 10+ percentage point jump in reports of students struggling to use the library.<sup>41</sup> At the same time, the percentages of participants who said the library lacked the needed materials or who didn’t have enough time to visit decreased.

Table 10: Comparison of 2017 and 2022 music faculty responses to “What factors keep you from using (more) library resources in teaching?”

	<b>Fall 2017 (n=38)</b>	<b>Fall 2022 (n=78)</b>
I have my teaching materials and/or they are available elsewhere	N/A	49 percent, n=39
Students struggle using the library <sup>42</sup>	11-13 percent; n=4, 5	23 percent, n=18
The library doesn't have the materials that I need	45 percent; n=17	20 percent, n=16
I don't have enough time to use the library/Inconvenience	26 percent, n=10	18 percent; n=14
I don't know what the library offers or has available	16 percent; n=6	15 percent, n=12
Using library resources is too complicated for me	N/A	5 percent; n=4

Table 11 illustrates the ways in which faculty's use of library services may have changed over time. Compared to fall 2017, reported use of physical reserves declined significantly but a majority of survey respondents still reported using this service in fall 2022. Use of library video and audio resources has risen, but utilization of instruction services has experienced a notable decline. Interestingly, faculty's recommendation of library purchases was down from the previous study, suggesting that the library either has most of what the faculty need or that faculty are unaware of the mechanisms by which requests can be made (in most cases, just sending an email).



Table 11: Comparison of 2017 and 2022 music faculty responses to “I typically use the following library services to support my teaching.”

	<b>Fall 2017 (n=38)</b>	<b>Fall 2022 (n=78)</b>
Collections from our or other libraries	N/A	82 percent (n=64)
Physical reserves	76 percent (n=29)	58 percent (n=45)
Electronic reserves	50 percent (n=19)	51 percent (n=40)
Playlists and direct access to audio databases	37 percent (n=14)	35 percent (n=27)
Direct video access	13 percent (n=5)	29 percent (n=23)
Class instruction	24 percent (n=9)	18 percent (n=14)
Short library intro (<15 minutes)	21 percent (n=8)	15 percent (n=12)
I recommend purchases	61 percent (n=23)	42 percent (n=33)

## **FURTHER RESEARCH AND LIMITATIONS**

Further research should examine how durable these changes are. Perhaps the fall of 2022 was still marked by awkward lockdown transitions that have since faded. Faculty practices may be slower to snap back than those of students, who may be more flexible in terms of adopting new practices or returning to old ones. A generation of students who entered high school rather than college as COVID ravaged the world may have quite different expectations for the library

than their older counterparts. Furthermore, an examination of a different variety of schools—smaller liberal arts colleges, standalone conservatories, universities in the south and west, etc.—would be informative. As differences in institutional context and collection demographics may affect library users' perceptions and practices, additional studies would help to illuminate how transferable these characteristics may or may not be.

There were a number of limitations to this study. As mentioned above, comparison in changing preferences and behaviors to 2017 data may or may not be direct given that two of the three schools studied were different. (There was not, however, a measurable difference among the institutions studied; that is, responses at Kent State were not noticeably different from Rutgers or Butler in 2017 or Eastman and Minnesota in 2022.) The 2022 study also relied on the faculty members' own recollections of what took place in the period before the pandemic and during closures. Usage trends were not confirmed with library usage statistics, but this may present an opportunity for future research. Lastly, survey respondents and interviewees may have had strong feelings, either positive or negative, about their library, and the perspective of users with a more neutral stance may not have surfaced. Given the interviewers were librarians, faculty who participated in interviews may have been inclined to express more positive views of the library compared to their actual feelings.

## **CONCLUSION**

Music faculty use a variety of content in their instruction, ranging from books and scores to audio, video, periodical, and reference materials. The last two decades have brought changes to the ways in which people access information, and while some music faculty have continued to teach with the same materials and methods they have always used, others have explored new options brought about by recent technological developments. Study respondents generally

reported a desire for libraries to purchase digital over physical resources, including electronic scores, books, periodicals, audio, video, and reference content. Print scores, on the other hand, still ranked highly on faculty's list of priorities. Uneasiness about student information literacy and discovery skills presented the largest obstacle in their use of library resources in teaching, and faculty expressed concerns over freemium services like YouTube playing a dominant role in presenting users with research content.

Patterns that emerged since pandemic-related lockdowns ceased have shown that libraries still played a vital role in the educational activities of their universities. It remains to be seen, however, whether these library usage activities will revert to previous practices, continue to change, or become entrenched. It therefore continues to be incumbent upon libraries to examine the needs and adapt to the expectations of their patrons as new technologies develop, and as challenges, epidemiological and otherwise, arise.

## **Appendix A. Faculty Survey Questions**

During which of these time periods did you teach? Check all that apply.

- Before the COVID-19 pandemic
- During virtual teaching/campus closure
- Currently
- I did not teach during these times

When teaching courses/lessons, what materials did you typically require students to use **before the pandemic**? Check all that apply; leaving blank indicates non-use.

- Textbook(s)
- Audio recordings
- Journal, newspaper, and/or magazine articles
- Books and/or book chapters (not textbooks)
- Scores
- Video
- Reference materials (e.g. encyclopedia entries)
- No materials required

*Carry Forward choices from “When teaching courses/lessons, what materials did you typically require students to use **before the pandemic**? Check all that apply; leaving blank indicates non-use.”*

Of these resources, which came **through the library before the pandemic**? Check all that apply.

- Textbook(s)
- Audio recordings
- Journal, newspaper, and/or magazine articles
- Books and/or book chapters (not textbooks)
- Scores
- Video

- Reference materials (e.g. encyclopedia entries)
- No materials required

When teaching courses/lessons **before the pandemic**, what materials did you typically require students to use that are **NOT from the library**? Check all that apply; leaving blank indicates non-use.

- Non-peer reviewed, crowdsourced internet resources (e.g., YouTube, blog posts, IMSLP)
- Open authoritative educational internet resources (e.g., Open Music Theory, Danielle Fosler-Lussier's Music on the Move, or an open access journal or textbook)
- Subscription-based media (e.g., Apple Music, Amazon Music/Video, Netflix)
- Personal or borrowed materials (e.g., books/scores/audio/video)
- Other (please list) \_\_\_\_\_

Which internet resources did you use in your teaching **before the pandemic**? Choose all that apply; leaving blank indicates non-use.

- YouTube
- Spotify or other audio streaming service
- IMSLP or other score site
- Wikipedia or other crowd-sourced website
- Blog posts or other (non-wiki) website
- Other (please list) \_\_\_\_\_

When teaching courses/lessons, what materials did you typically require students to use **during the university closure/virtual teaching**? Check all that apply; leaving blank indicates non-use.

- Textbook(s)
- Audio recordings
- Journal, newspaper, and/or magazine articles
- Books and/or book chapters (not textbooks)
- Scores
- Video
- Reference materials (e.g. encyclopedia entries)
- No materials required

*Carry Forward choices from “When teaching courses/lessons, what materials did you typically require students to use **during the university closure/virtual teaching**? Check all that apply; leaving blank indicates non-use.”*

Of these resources, which came **through the library during the university closure/virtual teaching**? Check all that apply.

- Textbook(s)
- Audio recordings
- Journal, newspaper, and/or magazine articles
- Books and/or book chapters (not textbooks)
- Scores

- Video
- Reference materials (e.g. encyclopedia entries)
- No materials required

When teaching courses/lessons **during the university closure/virtual teaching**, what materials did you typically require students to use that are **NOT from the library**? Check all that apply; leaving blank indicates non-use.

- Non-peer reviewed, crowdsourced internet resources (e.g., YouTube, blog posts, IMSLP)
- Open authoritative educational internet resources (e.g., Open Music Theory, Danielle Fosler-Lussier's Music on the Move, or an open access journal or textbook)
- Subscription-based media (e.g., Apple Music, Amazon Music/Video, Netflix)
- Personal or borrowed materials (e.g., books/scores/audio/video)
- Other (please list) \_\_\_\_\_

Which internet resources did you use in your teaching **during the closure/virtual teaching**?

Choose all that apply; leaving blank indicates non-use.

- YouTube
- Spotify or other audio streaming service
- IMSLP or other score site
- Wikipedia or other crowd-sourced website
- Blog posts or other (non-wiki) website

- Other (please list) \_\_\_\_\_

When teaching courses/lessons, what materials do you typically require students to use **currently when teaching**? Check all that apply; leaving blank indicates non-use.

- Textbook(s)
- Audio recordings
- Journal, newspaper, and/or magazine articles
- Books and/or book chapters (not textbooks)
- Scores
- Video
- Reference materials (e.g. encyclopedia entries)
- No materials required

*Carry Forward choices from “When teaching courses/lessons, what materials do you typically require students to use **currently when teaching**? Check all that apply; leaving blank indicates non-use.”*

Of these resources, which come **through the library in your current teaching**? Check all that apply.

- Textbook(s)
- Audio recordings
- Journal, newspaper, and/or magazine articles



- Books and/or book chapters (not textbooks)
- Scores
- Video
- Reference materials (e.g. encyclopedia entries)
- No materials required

When **currently** teaching courses/lessons, what materials do you typically require students to use that are **NOT from the library**? Check all that apply; leaving blank indicates non-use.

- Non-peer reviewed, crowdsourced internet resources (e.g., YouTube, blog posts, IMSLP)
- Open authoritative educational internet resources (e.g., Open Music Theory, Danielle Fosler-Lussier's Music on the Move, or an open access journal or textbook)
- Subscription-based media (e.g., Apple Music, Amazon Music/Video, Netflix)
- Personal or borrowed materials (e.g., books/scores/audio/video)
- Other (please list) \_\_\_\_\_

Which internet resources do you use in your **current** teaching? Choose all that apply; leaving blank indicates non-use.

- YouTube (1)
- Spotify or other audio streaming service (2)
- IMSLP or other score site (3)

- Wikipedia or other crowd-sourced website (4)
- Blog posts or other (non-wiki) website (5)
- Other (please list) (6) \_\_\_\_\_

What materials types should the library prioritize for future purchases that would support your teaching? Choose all that apply.

- Print books
- Ebooks
- Digital scores/Score databases with scores for downloading/printing
- CDs
- Streaming audio music databases (like Naxos)
- DVDs
- Online video databases (with performances, masterclasses, etc.)
- Print journals, newspapers, magazines
- Print reference materials
- Digital databases with reference materials (Oxford Music Online, etc.)
- Print scores
- Digital journals, newspapers, magazines
- I don't believe the library should prioritize any materials for future purchase

*Do not display if “I don’t believe the library should prioritize any materials for future purchase”=yes OR “What materials should the library prioritize for future purchase” is less than 2.*

*Carry Forward choices from “What material types should the library prioritize for future purchases that would support your teaching? Choose all that apply.”*

Of the choices, rank the top four materials you think the library should prioritize for purchase to support your teaching (1=highest priority):

- \_\_\_\_\_ Print books
- \_\_\_\_\_ Ebooks
- \_\_\_\_\_ Digital scores/Score databases with scores for downloading/printing
- \_\_\_\_\_ CDs
- \_\_\_\_\_ Streaming audio music databases (like Naxos)
- \_\_\_\_\_ DVDs
- \_\_\_\_\_ Online video databases (with performances, masterclasses, etc.)
- \_\_\_\_\_ Print journals, newspapers, magazines
- \_\_\_\_\_ Print reference materials
- \_\_\_\_\_ Digital databases with reference materials (Oxford Music Online, etc.)
- \_\_\_\_\_ Print scores
- \_\_\_\_\_ Digital journals, newspapers, magazines

I typically use the following library services to support my teaching (check all that apply):

	Before the pandemic	Used during virtual teaching/campus closure	Currently using
Collections from our library or other institutions' libraries (physical or electronic)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical library reserves (e.g., print, media)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electronic library reserves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Playlists and direct link access to audio recordings through the library	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Direct link access to video recordings through the library	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Class instruction by a librarian (1 class or more)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short library introduction by library personnel (15 minutes or less)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I recommend specific titles for the library to purchase to support my class curriculum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please list)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What factors keep you from using (more) library resources in classroom teaching/instruction (select all that apply)?

- I don't know what the library offers or has available
- I don't have enough time to use the library
- Using library resources is too complicated for me
- Students struggle using the library
- The library does not have the materials that I need

- I have my teaching materials and/or they are available elsewhere
- Other (please list) \_\_\_\_\_

Please include additional thoughts on how the library can help you with your teaching/instruction:

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Did you actively use Blackboard and/or Canvas in any of your instruction? Select all that apply:

- Before the pandemic
- During virtual teaching/campus closure
- Currently using

What portion of your instruction this semester takes place exclusively online?

- 0% - 20%
- 21% - 40%
- 41% - 60%
- 61% - 80%
- 81% - 100%

Has the pandemic pushed you to incorporate more open access resources in your instruction?

- Yes
- No

- I don't know
- Not applicable

What is your faculty status?

- FT Tenure track/tenured
- FT Non-tenure track
- Adjunct
- Post-doctoral fellow
- Graduate Assistant/Fellow

What is your age?

- <30
- 31 - 40
- 41 - 50
- 51-60
- 61+

How many years have you been a faculty member at a collegiate level?

- 0
- 1 - 3 years
- 4 - 6 years
- 7 - 12 years
- 12+ years

What is your primary area/home department?

- Music education
- Performance/conducting
- Music history / ethnomusicology / humanities
- Theory/composition
- Music therapy
- Other (please list) \_\_\_\_\_

## **Appendix B. Faculty Interview Questions**

1. How has the pandemic affected the way you use resources when teaching?
  - 1a. Has the pandemic affected how you teach using library resources?
2. Are there resources you adopted during the pandemic that will stick with you going forward?
3. What have you noticed about the experience your students have with using library materials?
  - 3a. Have you noticed that students encounter difficulties in using library materials?
  - 3b. Does this influence what library materials you might use in teaching?
4. How do you choose what resources to use in your teaching?
  - 4a. Do you prefer freely available internet resources in your teaching over library resources?
  - 4b. Why/why not?
5. What does the academic library collection of the future look like in your discipline?
6. What could the library do to better support your teaching? This could include resources and/or services.



## ABSTRACT

The dramatic impact of the COVID-19 pandemic on higher education and the growth in popularity of commercial services such as YouTube warrant an examination of how music faculty have and have not changed their teaching practices and what role the library has played in their pedagogy. Building on a 2017 publication, this mixed methods, multi-institutional study examined the practices of instructors at three universities to determine what materials they used to support their teaching, their preferred sources and formats of learning content, the library's role in meeting these needs, obstacles in using library resources, and the ways in which the pandemic changed their approach to using resources. Results indicated that faculty preferred for their library to invest in electronic collections over physical materials, they favored obtaining some types of materials from non-library sources, and their use of most library services had rebounded from the declines observed during institutional closures.

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<sup>1</sup> Joe C. Clark, Jonathan Saucedo, and Sheridan Stormes, "Faculty Format Preferences in the Performing Arts: A Multi-Institutional Study," *College & Research Libraries* 80, no. 4 (2019): 450-469, <https://doi.org/10.5860/crl.80.4.450>.

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<sup>16</sup> Melissa Blankstein, “Ithaka S+R US Faculty Survey 2021,” *Ithaka S+R*, last Modified July 14, 2022, <https://doi.org/10.18665/sr.316896>.

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- <sup>19</sup> Scoulas and De Groote, "Faculty Perceptions," 9.
- <sup>20</sup> Scoulas and De Groote, "Faculty Perceptions," 7.
- <sup>21</sup> Note that these findings are what patrons reported using, not what they may have actually used; Owens et al., "Do You Love Them Now?" 1-11.
- <sup>22</sup> A. Carey Huddleston, "Material Format Preference of Music Faculty at Kennesaw State University," *Practical Academic Librarianship: The International Journal of the SLA Academic Division* 11, no. 1 (2021): 3-25, <https://pal-ojs-tamu.tdl.org/pal/article/view/7134>.
- <sup>23</sup> "About Us," University of Minnesota, Twin Cities, <https://twin-cities.umn.edu/about-us>. Statistics accurate as of November 19, 2023.
- <sup>24</sup> "Eastman School of Music," The Eastman School of Music, University of Rochester, <https://www.esm.rochester.edu/>. Statistics accurate as of November 19, 2023. "Fast Facts/FAQ," The Eastman School of Music, University of Rochester, <https://www.esm.rochester.edu/about/facts/>. Statistics accurate as of November 19, 2023.
- <sup>25</sup> Clark, Saucedá, and Stormes, "Faculty Format Preferences," 450-469.
- <sup>26</sup> Bot-completed surveys were those completed in an extremely short time (i.e., in less than 15 seconds).
- <sup>27</sup> Twenty-five interviews were conducted. Twenty-two were interviews with individuals; 3 included two interviewees.
- <sup>28</sup> H. Russell Bernard and Gery W. Ryan, *Analyzing Qualitative Data: Systematic Approaches* (Thousand Oaks, CA: SAGE, 2010), 268.
- <sup>29</sup> Virginia Braun and Victoria Clarke, "Using Thematic Analysis in Psychology," *Qualitative Research in Psychology* 3, no. 2 (2006): 81, 85, <https://doi.org/10.1191/1478088706qp063oa>.
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- <sup>31</sup> Braun and Clarke, "Using Thematic Analysis in Psychology," 89-91; Mojtaba Vaismoradi, Hannele Turunen, and Terese Bondas, "Content Analysis and Thematic Analysis: Implications for Conducting a Qualitative Descriptive Study," *Nursing and Health Sciences* 15 (2013): 403, <https://doi.org/10.1111/nhs.12048>.
- <sup>32</sup> The thematic analysis presented below focuses on interview data and does not incorporate responses to the free text question included in the survey.
- <sup>33</sup> For information about thematic mapping as it relates to the thematic analysis methodology, see Virginia Braun and Victoria Clarke, "Using Thematic Analysis in Psychology," *Qualitative Research in Psychology* 3, no. 2 (2006): 89-92, <https://doi.org/10.1191/1478088706qp063oa>.
- <sup>34</sup> This disconnect between faculty practice and what they expect from students is consistent with Dougan's findings in 2016 and 2014; see Dougan, "YouTube has Changed Everything?" and Dougan, "Music, YouTube, and Academic Libraries."
- <sup>35</sup> The survey employed carry-over logic so as to display only options that related to respondents' answer(s) to the previous question about the materials they typically required students to use. If a survey respondent indicated in their response to Question 1 that they did not use a specific content type and/or they did not teach during a particular time period, they were not shown options to share data regarding that content type or time period in Question 2.
- <sup>36</sup> These findings align with those in Dougan, "YouTube has Changed Everything," and Dougan, "Music, YouTube, and Academic Libraries."
- <sup>37</sup> Faculty indicated that their use of physical course reserves during campus closures was not 0 percent, which may have resulted from the fact that when initial campus closures occurred in the middle of the Spring 2020 semester, physical reserves were likely already in place. Furthermore, some campuses included in the study returned to limited operations the following fall, so faculty may have also taken advantage of physical course reserves during that time period.
- <sup>38</sup> Abbazio, Clark, and Saucedá, "Music Students and Library Collections after Pandemic Closures," <https://hdl.handle.net/11299/262659>.

<sup>39</sup> “Many [students] expressed concerns about the quality and trustworthiness of free internet content and emphasized the importance they place on authority when choosing a score edition or audio/video recording.” Abbazio, Clark, and Saucedo, "Music Students and Library Collections after Pandemic Closures.”

<sup>40</sup> The 2017 study (published in 2019) also explored the preferences of theater and dance faculty. For the following comparisons, we have limited results to music affiliates. Joe C. Clark, Jonathan Saucedo, and Sheridan Stormes, “Faculty Format Preferences in the Performing Arts: A Multi-Institutional Study,” *College & Research Libraries* 80, no. 4 (2019): 450-469, <https://doi.org/10.5860/crl.80.4.450>.

<sup>41</sup> In the 2017 study, two separate questions asked whether “students have too much trouble locating and using library resources” and “students have too much trouble using the library website” with 11 percent and 13 percent responding in the affirmative, respectively.

<sup>42</sup> In the 2017 study, two separate questions asked whether “students have too much trouble locating and using library resources” and “students have too much trouble using the library website” with 11 percent and 13 percent responding in the affirmative, respectively.