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# 2024 Top Trends in Academic Libraries

A Review of the Trends and Issues

This article explores the topics and issues that have been trending in academic libraries over the past two years. It draws on research and initiatives from librarians across the profession, highlighting the constant change libraries face. The launch of ChatGPT sparked discussions about the potential impact of artificial intelligence, open access and open science initiatives continued to gain momentum, and the lingering effects of CO-VID-19 on library workspaces and student well-being remained significant. Rich citations to the literature provide opportunities for further exploration.

#### **AI and AI Literacy**

Artificial intelligence (AI) has been a trend in academic libraries for several years, but the release of ChatGPT and other generative AI tools has sparked renewed interest in the topic. This could have profound implications for academic libraries in the future. As Andrew M. Cox and Suvodeep Mazumdar note, "There is immense potential for it to increase access to knowledge in fundamental ways, for example through improved search and recommendation, through description of digital materials at scale, through transcription, and through automated translation."<sup>1</sup> AI also raises a host of ethical and legal issues, ranging from concerns about bias, privacy, non-representative training data, and misinformation to issues around copyright, plagiarism, and exploitation.<sup>2</sup>

Due to their ease of use, generative AI tools like ChatGPT have become extremely popular. These tools leverage large language models (LLMs) trained on massive datasets of text or images. LLMs use neural networks and natural language processing to analyze input prompts and generate responses based on the statistical patterns learned from the training data. Beyond ChatGPT, AI is also being incorporated into literature searching, summarization, and programming tools such as Elicit, Semantic Scholar, scite, and Copilot for GitHub.<sup>3</sup> With the growing popularity of these tools among students, faculty are increasingly turning to librarians to help cultivate AI literacy, discussing AI and its impact on literature searching and citations with their classes.<sup>4</sup>

Duri Long and Brian Magerko define AI literacy "as a set of competencies that enables individuals to critically evaluate AI technologies; communicate and collaborate effectively with AI; and use AI as a tool online, at home, and in the workplace."<sup>5</sup> Leo S. Lo outlines a

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framework to assist librarians and students in developing more effective prompts for generative AI, a process called prompt engineering. As he states, using his framework, "librarians can help students develop critical thinking skills, improve their comprehension of AI-generated content, and optimize AI-based research processes."<sup>6</sup> It is also important to raise awareness among students of the potential problems associated with AI including accuracy, hallucinations, bias, ethical issues, and environmental impact. Some institutions have begun developing workshop series to discuss and facilitate conversations with students about these issues,<sup>7</sup> and the University of Florida has started an AI Across the Curriculum initiative to introduce all undergraduate students to AI and better prepare them for the future workforce.<sup>8</sup>

Academic libraries have also been pursuing possible roles for AI within the library itself. This has included setting up AI research spaces, exploring robotics, investigating ethical issues and implicit bias in machine learning, and experimenting with using AI to classify images, refine metadata, and improve discovery.<sup>9</sup> Many also see a broader role for libraries within the AI landscape. Fiona Bradley calls for libraries to be involved in AI discussions at the national level and notes that "the sector is already participating in consultations and processes to ensure that the future of AI is rights-based, ethical, and transparent."<sup>10</sup>

#### **Open Pedagogy and Instructional Design**

Although open educational resource (OER) initiatives are not new, libraries have recently begun expanding their impact by investigating the potential to enrich student learning through open pedagogy. In their timely book, Mary Ann Cullen and Elizabeth Dill explore the foundation, approaches, and implementation of open pedagogy as a strategy for information literacy in higher education.<sup>11</sup> Open pedagogy requires students to be actively involved in the design, creation, and curation of OER learning materials through renewable assignments. These assignments invite students to contribute to the production and dissemination of knowledge, pushing them past more traditional library projects. Wikipedia assignments are among the most popular forms of renewable assignments, encouraging students to find, evaluate, and improve upon the information on its pages.<sup>12</sup> Other examples of renewable assignments include creating research toolkits, online courses, ebooks, and living websites.<sup>13</sup> Each of these renewable assignments allows students to see themselves as active creators of information rather than passive consumers.

According to Eric Werth and Katherine Williams, to increase student motivation, "OERenabled pedagogy must be structured in a way that allows autonomy, competence, and relatedness."<sup>14</sup> Aligning OER projects with practical and real-world knowledge can positively impact student engagement.<sup>15</sup> At the heart of this engagement is inclusive practice. By creating a supportive environment where all students have access to the same materials, instructors foster inclusivity in their courses.<sup>16</sup> Instructors can also motivate students to see the value of open pedagogy by helping them find their own interests and passion within these assignments,<sup>17</sup> showing students that they have control over their content,<sup>18</sup> and demonstrating that their work can have a global impact.<sup>19</sup>

Concerns have been raised about the high workload and long-term sustainability of open pedagogy. Kate McNally Carter and Ariana Santiago find that "workload was often minimized or entirely overlooked as a factor in many studies in favor of highlighting student success outcomes" and advise working toward sustainability by creating adaptable renewable assignments that can fit into many contexts and subject areas.<sup>20</sup> Bryan McGeary, Christopher Guder, and Ashwini Ganeshan further suggest that broad groups of staff should contribute to this important work for OER-enabled pedagogy to be sustainable.<sup>21</sup>

## **Open Science and Reproducibility**

As early advocates for open access and research data management, libraries are now assessing their potential roles in the burgeoning open science movement, which increasingly emphasizes equity, collaboration, reproducibility, security, and privacy in supporting the whole research ecosystem.<sup>22</sup> Much of this recent interest in open science has been spurred by the federal government, with US agencies collaborating on the Year of Open Science campaign, and NASA launching its Transform to Open Science (TOPS) initiative and Open Science 101 virtual training.<sup>23</sup> At the institutional level, many universities and libraries have joined the Higher Education Leadership Initiative for Open Scholarship (HELIOS Open), which aims to collaborate on "a more transparent, inclusive, and trustworthy research ecosystem" through presidential commitment, campus engagement, and communities of practice.<sup>24</sup>

As open scholarship gains momentum, libraries face growing calls to expand their roles beyond technical support. Authors from UNESCO emphasize the need for libraries to be "a bridge between local contexts and the global scholarly community,"<sup>25</sup> while LIBER (Association of European Research Libraries) identifies "advancing open science" as a core component of its strategy, aiming for libraries to "stimulate, facilitate, co-develop and manage infrastructures and practices designed to take Open Science to the next level."<sup>26</sup> Reflecting these calls, a recent book from ACRL positions open science as "an emerging synthesis of the various streams of open."<sup>27</sup> It recommends changes to incentive structures and urges consolidation of siloed services to create an open infrastructure aligned with open research values and available equally to all researchers. By promoting open practices and facilitating infrastructure development, libraries can solidify their place as leaders in the evolving open scholarship landscape.

As advocates for open science, libraries also contribute to one of its key outcomes: reproducibility.<sup>28</sup> This new area of service requires librarians to become deeply integrated in research communities, understanding researchers' needs and tools while simultaneously leveraging their unique position as institutional hubs to connect stakeholders and research services partners.<sup>29</sup> Thanks to stricter National Institutes of Health demands for research rigor and reproducibility, health science librarians have emerged as key players in educating researchers on these topics. Their success stories showcase libraries' potential to deliver valuable instruction in this crucial area, while also underlining the critical need for collaborative partnerships to further enhance research reproducibility services.<sup>30</sup>

# **Open Access and Equitable Publishing**

In the wake of recent calls for more open research publication practices, researchers have been exploring the impact of article processing charges, transformative agreements, open access models, and new policy development on equity and access in publishing practices. Findings show that faculty perceptions of open access publishing have remained virtually the same over the past twenty years, citing commonplace challenges that have yet to be resolved: uncertainty around the prestige of open access journals, confusion around types of open access, and lack of clarity and acceptance of open access in the promotion and tenure process.<sup>31</sup> On the other hand, students increasingly rely on open access articles in their assignments. A study of community college students found that 56.8% of their citations were open access articles, with one key benefit being that they "will still have access to open access search tools after they are no longer in college."<sup>32</sup>

Within that context, many researchers feel that the open access movement has been coopted by commercial publishers and are advocating for a return to scholar-led publishing communities. Discussing the global limitations of corporate publishing, several authors urge libraries and consortia to support their research communities by avoiding bundled publishing service agreements, contributing to scholar-led initiatives, and redistributing funds to support the Global South.<sup>33</sup> In addition, there is growing understanding that open access does not necessarily mean universal accessibility. Multiple authors have shed light on the inequities within open access publishing, including design practices and publishing cost structures that are exclusionary; researchers recommend libraries focus on integrating accessibility practices into design<sup>34</sup> and support bibliodiversity to emphasize "the critical diversity of authors and scholarly works representing cultures, languages, genres and all kinds of scholarly and scientific endeavours."<sup>35</sup>

A series of new tools and proposals have recently been released to guide libraries and scholars as they work to support a values-driven publishing ecosystem. These guidelines call for systems that enable scholars to choose when their research is made public and decenter the journal article as the sole object of importance in the research lifecycle,<sup>36</sup> encourage libraries to align their publishing infrastructure and practices with key values and ethical frameworks,<sup>37</sup> and propose helping "new and established open access journals in navigating the rapidly changing landscape of open access publishing."<sup>38</sup>

### **Disrupting and Reconceiving Collection Practices**

While there had been actions and initiatives relating to diversity, equity, and inclusion (DEI) in libraries before 2020, much of that effort consisted of broad advocacy and raising awareness.<sup>39</sup> Libraries are increasingly recognizing that making good on public statements will require firm resource commitments, disruption of existing systems, and sustained action in multiple arenas.<sup>40</sup> This work requires deep reflection and disruption: deconstructing systems for collecting and describing materials, deconstructing myths of librarian authority, and deconstructing student assumptions about information.

In recent years, libraries have begun putting more attention and action into re-evaluating library collections and collection management practices. Auditing collections through a social justice lens or to address colonialist and Euro-centric practices involves re-examining values, defining what "diversity" means in the context of collections, and setting tangible markers for progress.<sup>41</sup> In setting these parameters, it's important to "embrace imperfection,"<sup>42</sup> which might include defining a more targeted goal or an initial starting point.<sup>43</sup> In each case, these efforts are leading to a re-examination of acquisition practices and systems, including approval plans and demand-driven acquisition programs, which may "amplify biases already present in the higher education and publishing industries."<sup>44</sup>

In addition to reallocating collection funds, libraries acting to make their collections more diverse and inclusive are reconsidering personnel commitments and involving more people in collection activities. Reversing earlier trends, some libraries are increasing staff time on collection development and cataloging, and they are partnering with underrepresented communities to select and describe materials.<sup>45</sup> This involves multiple points of outreach and consultation over the course of a project, and it requires libraries to embrace the complexities that their partners share about working with multiple communities.<sup>46</sup> Regardless of approach, libraries will need to consider how to sustain these improvements in collection building and management practices throughout changes in budgets, leadership, and staffing levels.<sup>47</sup>

## **Politicization of Academic Libraries**

The landscape of academic libraries continues to be significantly impacted and shaped by a highly political and polarizing climate. As academic libraries navigate this landscape, it becomes crucial for them to strike a balance between neutrality and civic engagement, acknowledging the inherent political dimensions of their collections, programs, and spaces. They must continue to maintain an active role in the enactment of democracy, despite ongoing and future threats.

Renowned scholar John Buschmann contends in several scholarly publications that libraries historically play an important role in the democratic fabric of society and navigate crises while persisting through terrorist acts,<sup>48</sup> politically charged environments,<sup>49</sup> and pandemics.<sup>50</sup> Even during extreme geopolitical crises like wars and international sanctions, libraries are implicated as active participants in affecting and responding to the complex sociopolitical environment they inhabit.<sup>51</sup> In trying to counter fake news rhetoric, libraries can unintentionally be drawn into political processes by simply providing research services and fighting misinformation and disinformation.<sup>52</sup> In one study, several land-grant university library websites were analyzed and found to indeed be "serving as significant providers of political information during politically turbulent times."<sup>53</sup>

Although censorship of library collections using "book bans" has primarily affected public libraries, academic libraries now find they too are being drawn into this heated dialogue, especially surrounding social justice, DEI, and antiracism initiatives. Zoë Abbie Teel contends that anti-DEI legislation may extend its impact to potentially influence library policies and acquisitions, including "the availability of certain materials" that may be seen as promoting DEI.<sup>54</sup> The question of whether libraries can remain "neutral" in the face of social injustice has created debate among library practitioners.<sup>55</sup> Steve Rosato discusses the role of academic librarians and publishers as "vanguards" of critical DEI content,<sup>56</sup> and Annis Lee Adams presents an array of antiracism resources to support library staff, emphasizing the active role libraries play in addressing racial issues.<sup>57</sup> Libraries can also amplify their antiracism resources by partnering with other campus stakeholders.<sup>58</sup> Two articles highlight the need for libraries to actively support inclusivity, with Qing H. Stellwagen and Steven Bingo emphasizing cultural celebrations as a means of creating a sense of community on campus<sup>59</sup> and Silvia Vong discussing the impact of racial capitalism on academic librarians and libraries, specifically focusing on issues of representation and equity within library staff.<sup>60</sup>

# Anti-DEI Legislation, Academic Freedom, and Unionization

In recent years, academic librarians and library staff have experienced the growing challenge of low morale and burnout.<sup>61</sup> Compounding this for many staff, a recent wave of anti-DEI legislation has been introduced and passed in many states. These laws impose restrictions on DEI offices, staff training, diversity statements, and "identity-based preferences for

hiring and admissions," with one state's legislation compelling public colleges to designate "agents" to oversee "prohibitions on DEI spending."<sup>62</sup> Some states have also severed ties with the American Library Association (ALA)<sup>63</sup> amid allegations that the association is constrained by its perspectives on gender ideology and a left-leaning bias.<sup>64</sup>

The contentious atmosphere surrounding library associations and the uptick in book challenges, particularly against titles by or about LGBTQIA+ people and people of color or relating to DEI content,<sup>65</sup> have implications for academic libraries and academic freedom in particular. The Association of American University Professors emphasizes the significance of "academic freedom, tenure, and shared governance" in providing a foundation for faculty members.<sup>66</sup> Tenure is seen as a crucial safeguard against the censorship and book banning observed in school libraries, ensuring impartiality and protecting academic libraries.<sup>67</sup>

Unions may also play a role in protecting academic freedom. Higher education has witnessed an increase in union activities, strikes, and labor activism recently.<sup>68</sup> The pandemic has played a role in sparking these efforts, with one author suggesting it "exacerbated existing issues and brought up new ones,"<sup>69</sup> and 2023–24 ALA President Emily Drabinski has recognized the role of unions in protecting library workers from extremist groups, censorship, and unsafe conditions.<sup>70</sup> Library unions provide guarantees for fair wages,<sup>71</sup> improved working conditions,<sup>72</sup> the preservation of academic freedom,<sup>73</sup> and protection against unilateral decision-making, such as institutional reorganization and reimagining library workers' research and roles.<sup>74</sup> The recent increase in union activities reflects a growing recognition of the power of collective bargaining to address the multifaceted challenges facing academic libraries in the current sociopolitical climate.

#### **Post-pandemic Workplace and Hybrid Work Environments**

The pandemic triggered widespread soul-searching, leading librarians to re-evaluate their priorities and seek workplaces aligned with their values. Not immune from "The Great Reshuffle," many library staff have considered leaving their positions due to pandemic stress and lack of intrinsic motivators like work-life balance and growth. In a recent survey of academic librarians, nearly half said they were thinking of leaving their job "about half the time or more."75 When they remain, they want to have a role in defining the future. In one study, librarians "repeatedly emphasized the need for working conditions going forward to be governed through collegiality and conversation, rather than defaulting to the prepandemic organizational norms."76 Andrea Falcone and Lyda Fontes McCartin suggest that libraries must adapt to this shift by prioritizing talent retention through improved compensation, workload management, and flexible work options.<sup>77</sup> At the same time, perceived inequities within libraries and universities can fuel dissatisfaction and burnout.<sup>78</sup> Academic librarians may also risk burnout due to the emotional labor inherent in their work: "Meeting the societal and user expectations of being a librarian requires simultaneously regulating or performing one's own emotions and interpreting, managing, and responding to the emotions of users."79 Effective prevention requires emotional literacy and supportive leadership that acknowledges the emotional toll and promotes decompression strategies, especially for librarians of color who often bear the brunt of this burden.<sup>80</sup>

In this new workplace environment, many libraries are embracing flexible work arrangements as one strategy for addressing dissatisfaction and burnout. "Many workers now perceive pre-pandemic work modalities and workplace expectations as unnecessary, unrealistic, and undesirable, and employers have taken notice of the shift in employee attitudes.<sup>\*81</sup> In fact, recent surveys have shown that three-quarters of academic libraries now offer hybrid work environments with flexible work arrangements. These same studies note that remote work offers benefits like greater productivity and reduced stress while onsite work fosters better onboarding, engagement, and team building. As a result, even when flexible work arrangements are available, usage by staff varies widely, suggesting a diverse workforce with a range of preferences.<sup>82</sup> To foster trust, knowledge, empathy, and community in such a hybrid environment, institutions must acknowledge its complexities and invest in intentional efforts to rebuild a strong academic workplace culture.<sup>83</sup> This new hybrid environment may also require redesigning staff spaces and setting new priorities for onsite work. The physical office is predicted to transform into a space for building social connections, fostering learning, and sparking innovation, which will necessitate intentional leadership that prioritizes face-to-face interaction and facilitates collaboration within a redesigned office environment.<sup>84</sup>

### **Makerspaces and Tech Spaces**

Designed for innovative and creative experimentation, makerspaces are defined as "low- and high-tech communal learning environments where people can create, build, and invent with digital and fabrication tools."<sup>85</sup> While makerspaces started mostly in engineering departments, libraries quickly adopted the idea to become leaders in innovation through technology. In fact, the library is now the most common place for a makerspace to live on an academic campus.<sup>86</sup> Makerspaces found in academic libraries tend to "focus on digital fabrication, using computerized software-driven equipment," with 3D printers and laser cutters being "the most commonly described equipment in Makerspaces in the research literature."<sup>87</sup>

As libraries continue to assess their user needs, support for these spaces is increasingly important. However, maintaining a thriving makerspace does not come without challenges, which include proper staffing and financial support for costly technology.<sup>88</sup> Despite these challenges, librarians are collaborating more through their makerspaces to amplify student engagement in the library. While not every endeavor has been successful, initiatives like the 3D Selfie Booth<sup>89</sup> and Game Jam<sup>90</sup> showcase library staff's creativity and highlight positive interactions with makerspace technology, leading authors to express interest in deeper collaboration.

By analyzing student learning styles against major typologies of learning, the effectiveness of the makerspace on student engagement becomes clear. Students using these spaces learn through creation and interaction—with a community, experts, and a real-world environment. In makerspaces, "students are engaging in both content and culture knowledge and skills along with communication, management, ingenuity, and self-awareness."<sup>91</sup> Students who visit makerspaces on a regular basis are more inclined to continue their use over time, indicating that ongoing engagement is crucial for students to perceive the usefulness of the space.<sup>92</sup>

Makerspaces enable students to build self-efficacy, explore their entrepreneurial spirit,<sup>93</sup> and learn skills that will last them long past their academic career. Evolving alongside patron needs, academic libraries are integrating makerspaces into their future vision, offering access to new technologies, collaborative opportunities, and platforms for exploring personal interests.<sup>94</sup>

# **Supporting Student Well-being Post-pandemic**

The changes to learning environments and increased social isolation during the COVID-19 pandemic had a mental health impact on current and incoming college students including increased rates of depression and anxiety.95 Academic libraries are adopting new strategies to address student mental health and well-being that go beyond scholarship to support for the whole student.<sup>96</sup> The "whole-university" approach is in use in some institutions with libraries serving as a vital part of an interconnected team of university offices working together to support student mental health.<sup>97</sup> These efforts align with trends focused on offering more personalized, socially centered service in libraries,<sup>98</sup> and they also relate to initiatives to support the evolving usage of library space. Students value the library as a social space and visit libraries as a way to overcome social isolation and find community.<sup>99</sup> For example, students in a recent focus group study noted using physical library spaces to socialize and de-stress<sup>100</sup> while librarians at Virginia Commonwealth University created a guide with audio and visual resources to help students re-create the library mood from home during the pandemic.<sup>101</sup> As another way to prioritize student wellness, libraries are adding leisure reading collections to support mindfulness,<sup>102</sup> and they are weaving mindfulness practices into information literacy instruction.<sup>103</sup> Academic librarians have also been looking inward, acknowledging the emotional work involved in supporting students and managing change through the pandemic.<sup>104</sup>

## **Final Note**

The future holds many hurdles for academic librarians, such as the possible impacts of AI on higher education and the uncertainty of recurring operating and materials budgets. We are simultaneously thrilled by the new possibilities for hybrid teamwork and workspaces, the growing demand for diverse viewpoints, and the integration of innovative methods to provide access to our common resources. These challenges will require new policies and practices, but they will also enable us to innovate, adapt, and respond to complex and evolving phenomena in our common pursuit of supporting student achievement and enhancing teaching, learning, and academic research. *#* 

## Notes

1. Andrew M. Cox and Suvodeep Mazumdar, "Defining Artificial Intelligence for Librarians," *Journal of Librarianship and Information Science*, published ahead of print (December 22, 2022), https://doi.org/10.1177/09610006221142029, p. 2.

2. Fiona Bradley, "Representation of Libraries in Artificial Intelligence Regulations and Implications for Ethics and Practice," *Journal of the Australian Library and Information Association* 71, no. 3 (July 3, 2022): 189–200, https://doi.org/10.1080/24750158.2022.2 101911; Mohammad Hosseini and Kristi Holmes, "The Evolution of Library Workplaces and Workflows via Generative AI," *College & Research Libraries* 84, no. 6 (November 1, 2023): 836–42, https://doi.org/10.5860/crl.84.6.836; Aileen B. Houston and Edward M. Corrado, "Embracing ChatGPT: Implications of Emergent Language Models for Academia and Libraries," *Technical Services Quarterly* 40, no. 2 (April 3, 2023): 76–91, https://doi.or g/10.1080/07317131.2023.2187110. 3. Matthew Hutson, "Could AI Help You to Write Your Next Paper?," *Nature* 611, no. 7934 (October 31, 2022): 192–93, https://doi.org/10.1038/d41586-022-03479-w.

4. Lauren Coffey, "AI, the Next Chapter for College Librarians," *Inside Higher Ed*, November 3, 2023, https://www.insidehighered.com/news/tech-innovation/libraries/2023 /11/03/ai-marks-next-chapter-college-librarians.

5. Duri Long and Brian Magerko, "What Is AI Literacy? Competencies and Design Considerations," in *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (CHI '20: CHI Conference on Human Factors in Computing Systems, Honolulu HI USA: ACM, 2020), 1–16, https://doi.org/10.1145/3313831.3376727, p. 2.

6. Leo S. Lo, "The CLEAR Path: A Framework for Enhancing Information Literacy through Prompt Engineering," The Journal of Academic Librarianship 49, no. 4 (July 2023): 102720, https://doi.org/10.1016/j.acalib.2023.102720, p. 3.

7. Amanda Wheatley and Sandy Hervieux, "Separating Artificial Intelligence from Science Fiction: Creating an Academic Library Workshop Series on AI Literacy," in *The Rise of AI: Implications and Applications of Artificial Intelligence in Academic Libraries*, ACRL Publications in Librarianship 78 (Chicago: Association of College & Research Libraries, 2022), 61–70.

8. Jane Southworth, Kati Migliaccio, Joe Glover, Ja'Net Glover, David Reed, Christopher McCarty, Joel Brendemuhl, Aaron Thomas, "Developing a Model for AI Across the Curriculum: Transforming the Higher Education Landscape via Innovation in AI Literacy," *Computers and Education: Artificial Intelligence* 4 (2023): 100127, https://doi.org/10.1016/j .caeai.2023.100127.

9. Sandy Hervieux and Amanda Wheatley, eds., *The Rise of AI: Implications and Applications of Artificial Intelligence in Academic Libraries*, ACRL Publications in Librarianship 78 (Chicago: Association of College & Research Libraries, 2022).

10. Bradley, "Representation of Libraries in Artificial Intelligence," 196.

11. Mary Ann Cullen and Elizabeth Dill, eds., *Intersections of Open Educational Resources and Information Literacy* (Chicago: Association of College & Research Libraries, 2022).

12. Yolanda Bergstrom-Lynch, Mary Mahoney, and Joelle Thomas, "Empowering Students as OER Creators to Challenge Information Privilege," in *Intersections of Open Educational Resources and Information Literacy*, ed. Mary Ann Cullen and Elizabeth Dill (Chicago: Association of College & Research Libraries, 2022), 237–64; Jolie A. L. Gareis, Erin I. Larson, Marcelo Ardón, John A. Berges, Jessica E. Brandt, Kaitlyn M. Busch, Victoria L. S. Chraibi, Elizabeth N. Gallagher, Kelly L. Hondula, Dustin W. Kincaid et al., "Using Wikipedia Assignments to Teach Critical Thinking and Scientific Writing in STEM Courses," *Frontiers in Education* 7 (2022), https://doi.org/10.3389/feduc.2022.905777; Diana E. Park and Laurie M. Bridges, "Meet Students Where They Are: Centering Wikipedia in the Classroom," *Communications in Information Literacy* 16, no. 1 (March 2022): 4–23, https://doi.org/10.15760/comminfolit.2022.16.1.2; Paul Anthony Thomas, Matthew Jones, and Spencer Mattingly, "Using Wikipedia to Teach Scholarly Peer Review: A Creative Approach to Open Pedagogy," *Journal of Information Literacy* 15, no. 2 (August 6, 2021), https://doi.org/10.11645/15.2.2913.

13. Teresa Schultz and Elena S. Azadbakht, "Exploring Open Pedagogy in a Librarian-Taught Honors Course," *Communications in Information Literacy* 17, no. 1 (June 1, 2023): 221–37, https://doi.org/10.15760/comminfolit.2023.17.1.2; Torrey Trust, Robert W Maloy, and Sharon Edwards, "College Student Engagement in OER Design Projects: Impacts on Attitudes, Motivation, and Learning," *Active Learning in Higher Education* 24, no. 3 (November 1, 2023): 353–71, https://doi.org/10.1177/14697874221081454; Peter Daniel Wallis, Jennifer Mae White, and Stephen T. Kerr, "High Structure Renewable Assignments: A Design Study," *Open Praxis* 14, no. 1 (January 2022): 39–53, https://doi.org/10.55982 /openpraxis.14.1.146; Lindsey Gumb, "OER-Enabled Pedagogy Meets Info Lit: Empowering the Next Generation of Open Scholars," in *Intersections of Open Educational Resources and Information Literacy*, ed. Mary Ann Cullen and Elizabeth Dill (Chicago: Association of College & Research Libraries, 2022), 49–68.

14. Eric Werth and Katherine Williams, "What Motivates Students about Open Pedagogy? Motivational Regulation through the Lens of Self-Determination Theory," *International Review of Research in Open and Distributed Learning* 22, no. 3 (August 1, 2021): 34–54, https://doi.org/10.19173/irrodl.v22i3.5373, p. 48.

15. Vanessa Arce and Rena D Grossman, "Students Speak: Animating Stories about the Value of Information," in *Intersections of Open Educational Resources and Information Literacy*, ed. Mary Ann Cullen and Elizabeth Dill (Chicago: Association of College & Research Libraries, 2022), 199–211; Trust, Maloy, and Edwards, "College Student Engagement in OER Design Projects."

16. Lauren Hays and Melissa N. Mallon, "Using OER to Promote Inclusion in Higher Education Institutions," *Currents in Teaching & Learning* 12, no. 2 (January 2021): 20–33; Wallis, White, and Kerr, "High Structure Renewable Assignments."

17. Eric Werth and Katherine Williams, "Learning to Be Open: Instructor Growth through Open Pedagogy," *Open Learning: The Journal of Open, Distance and e-Learning* 38, no. 4 (October 2, 2023): 301–14, https://doi.org/10.1080/02680513.2021.1970520.

18. Erika Bailey and Marisa Petrich, "Grounded in Agency: Privacy Literacy for Student Empowerment," *Alki: The Washington Library Association Journal* 38, no. 3 (2022): 31–37.

19. Trust, Maloy, and Edwards, "College Student Engagement in OER Design Projects."

20. Kate McNally Carter and Ariana Santiago, "Exploring Sustainability in Library Support for Open Pedagogy Collaborations," *Communications in Information Literacy* 17, no. 1 (June 1, 2023): 238–59, https://doi.org/10.15760/comminfolit.2023.17.1.3, p.241.

21. Bryan McGeary, Christopher Guder, and Ashwini Ganeshan, "Opening up Educational Practices through Faculty, Librarian, and Student Collaboration in OER Creation: Moving from Labour-Intensive to Supervisory Involvement," *Partnership: The Canadian Journal of Library & Information Practice & Research* 16, no. 1 (January 2021): 1–27, https:// doi.org/10.21083/partnership.v16i1.6149.

22. "Open Science Announcements from Federal Agencies," Science.gov, 2023, https://open.science.gov/.

23. "Take Open Science 101," NASA Transform to Open Science, 2023, https://nasa.github.io/Transform-to-Open-Science/take-os101/.

24. "Higher Education Leadership Initiative for Open Scholarship," HELIOS Open, 2024, https://www.heliosopen.org.

25. Ana Peršić and Tiffany Straza, "Open Science for All: Implementing the UNESCO Recommendation on Open Science for an Equitable and Just Transition to Open Science," *College & Research Libraries News* 84, no. 10 (November 2, 2023), https://doi.org/10.5860 /crln.84.10.377, p. 381.

26. "Strategy 2023–2027," LIBER Europe, 2023, https://libereurope.eu/strategy/.

27. Maria Bonn, Josh Bolick, and Will Cross, eds., *Scholarly Communication Librarianship and Open Knowledge* (Chicago: Association of College & Research Libraries, 2023), p. 82.

28. Joshua Quan, "Toward Reproducibility: Academic Libraries and Open Science," in *Data Science in the Library: Tools and Strategies for Supporting Data-Driven Research and Instruction*, ed. Joel Herndon (London: Facet, 2022), 57–68.

29. Birgit Schmidt et al., "Emerging Roles and Responsibilities of Libraries in Support of Reproducible Research," *LIBER Quarterly: The Journal of the Association of European Research Libraries* 33, no. 1 (2023): 1–21, https://doi.org/10.53377/lq.14947.

30. Fred Willie Zametkin LaPolla et al., "Rigor and Reproducibility Instruction in Academic Medical Libraries," *Journal of the Medical Library Association: JMLA* 110, no. 3 (2022): 281–93, https://doi.org/10.5195/jmla.2022.1443; Mark MacEachern and Sara Samuel, "Research Reproducibility Activities in Health Sciences Libraries," *Journal of eScience Librarianship* 12, no. 2 (August 10, 2023): e650, https://doi.org/10.7191/jeslib.650.

31. Elisabeth Shook and Amy Vecchione, "Faculty Perceptions of Open Access Publishing: Investigating Faculty Publishing Habits to Evaluate Library Collection Alignment," *Journal of Librarianship and Scholarly Communication* 10, no. 1 (December 16, 2022), https://doi.org/10.31274/jlsc.13216.

32. Tim Dolan and Duncan Claffin, "Assessing the Value of Subscription Journal Packages and Open Access Journal Articles in a Community College Context," *Journal of Librarianship and Scholarly Communication* 11, no. 1 (July 28, 2023), https://doi.org/10.31274/jlsc.15673.

33. Björn Brembs et al., "Replacing Academic Journals," *Royal Society Open Science* 10 (July 19, 2023): 230206, https://doi.org/10.1098/rsos.230206; Emily Cox, "Research Outputs as Testimony & the APC as Testimonial Injustice in the Global South," *College & Research Libraries* 84, no. 4 (2023), https://doi.org/10.5860/crl.84.4.513; Katherine Elizabeth Skinner, Catherine Mitchell, and Kristen Ratan, "Bundle of Sticks' and the Value of Interdependence: Building a Tools and Services Collective," *The Journal of Electronic Publishing* 25, no. 1 (April 26, 2022), https://doi.org/10.3998/jep.1994.

34. Matthew Weirick Johnson and Salma Abumeeiz, "The Limits of Inclusion in Open Access: Accessible Access, Universal Design, and Open Educational Resources," *Journal of Librarianship and Scholarly Communication* 11, no. 1 (August 8, 2023), https://doi.org /10.31274/jlsc.14399.

35. Lai Ma, Jane Buggle, and Marie O'Neill, "Open Access at a Crossroads: Library Publishing and Bibliodiversity," *Insights the UKSG Journal* 36 (May 9, 2023): 10, 1–8, https://doi.org/10.1629/uksg.613, p. 1.

36. Bodo Stern, Zoé Ancion, Andreas Björke, Ashley Farley, Marte Qvenild, Katharina Rieck, Joroen Sondervan, Johan Rooryck, Robert Kiley, Maria Karatzia, and Nora Papp., "Towards Responsible Publishing: Seeking Input from the Research Community to a Draft Proposal from cOAlition S," Zenodo, October 31, 2023, https://doi.org/10.5281 /ZENODO.8398480.

37. Sarah Lippincott and Katherine Skinner, "FOREST Framework for Values-Driven Scholarly Communication" (Educopia Institute, 2022), https://www.nextgenlibpub.org /forest-framework; Library Publishing Coalition, "An Ethical Framework for Library Publishing, Version 2.0," May 2023, https://librarypublishing.org/resources/ethical-framework/.

38. Alex Mendonça, Andrea Chiarelli, Andy Byers, Andy Nobes, Chris Hartgerink, Clarissa França Dias Carneiro, Elle Malcolmson, Ivonne Lujano, Katie Foxall, Lucia Loffreda et al., "The Open Access Journals Toolkit (English)," Zenodo, June 27, 2023, https://doi.org/10.5281/zenodo.8017033.

39. Emily P. Jones, Nandita S. Mani, Rebecca B. Carlson, Carolyn G. Welker, Michelle Cawley, and Fei Yu, "Analysis of Anti-Racism, Equity, Inclusion and Social Justice Initiatives in Library and Information Science Literature," *Reference Services Review* 50, no. 1 (March 2, 2022): 81–101, https://doi.org/10.1108/RSR-07-2021-0032.

40. Monica Figueroa and Kristan Shawgo, "You Can't Read Your Way out of Racism': Creating Anti-Racist Action out of Education in an Academic Library," *Reference Services Review* 50, no. 1 (2022): 25–39, https://doi.org/10.1108/RSR-06-2021-0025.

41. Kara Bledsoe, Danielle Miriam Cooper, Roger C. Schonfeld, and Oya Y. Rieger, "Leading by Diversifying Collections: A Guide for Academic Library Leadership" (Ithaka S+R, November 9, 2022), https://doi.org/10.18665/sr.317833.

42. Bledsoe et al., "Leading by Diversifying Collections," 11.

43. Renae J. Watson, Khaleedah Thomas, and Kristine Nowak, "Adhocking It: Overcoming the Overwhelm to Start Creating: Equitable and Inclusive Collections Now," in *Practicing Social Justice in Libraries*, ed. Alyssa Brissett and Diana Moronta (Routledge, 2023); Jessica M. Abbazio, Avery Boddie, and Ellen Ogihara, "Music Libraries and an Expanding Repertory: Suggested Strategies for Building Diverse Music Library Collections," *Notes (Music Library Association)* 78, no. 3 (2022): 353–79, https://doi.org/10.1353/not.2022.0005; Veronica Wells, Michele Gibney, and Mickel Paris, "Student Learning and Engagement in a DEI Collection Audit: Applying the ACRL Framework for Information Literacy," *College* & *Research Libraries News* 83, no. 8 (2022), https://doi.org/10.5860/crln.83.8.335.

44. Lori Jahnke, Kyle Tanaka, and Christopher Palazzolo, "Ideology, Policy, and Practice: Structural Barriers to Collections Diversity in Research and College Libraries," *College & Research Libraries* 83, no. 2 (2022), https://doi.org/10.5860/crl.83.2.166, p. 175.

45. Bledsoe et al., "Leading by Diversifying Collections."

46. Heather M. Campbell, Christopher S. Dieckman, Nausicaa L. Rose, and Harriet E. Wintermute, "Improving Subject Headings for Iowa Indigenous Peoples," *Library Resources* & *Technical Services* 66, no. 1 (March 11, 2022): 48, https://doi.org/10.5860/lrts.66n1.48.

47. Colleen S. Mullally, Jeremy Whitt, and Kayla Valdivieso, "Starting and Sustaining JEDI Acquisitions and Collections in Academic Libraries: Considerations and Strategies for Success," in *Perspectives on Justice, Equity, Diversity, and Inclusion in Libraries*, ed. Nandita S. Mani, Michelle A. Cawley, and Emily P. Jones (IGI Global, 2023), 104–22, https://doi.org/10.4018/978-1-6684-7255-2.ch006.

48. John Buschman, "Libraries, Democracy, and Citizenship: Twenty Years after 9/11," *The Library Quarterly* 93, no. 2 (April 1, 2023): 181–201, https://doi.org/10.1086/723850.

49. John Buschman, "Confusion Made Its Masterpiece: The Political Climate of Libraries (and Moving Forward)," *The Library Quarterly* 91, no. 2 (April 1, 2021): 129–36, https://doi.org/10.1086/713045.

50. John Buschman, "COVID-19 Doesn't Change Anything: Neoliberalism, Generation-ism, Academic Library Buildings, and Lazy Rivers," *The Journal of Academic Librarian-ship* 48, no. 4 (July 2022): 102558, https://doi.org/10.1016/j.acalib.2022.102558.

51. Adebowale Adetayo, Khadijat Ajayi, and Ranmilowo Komolafe, "Wars and Sanctions: Do Libraries Have a Role to Play?," *The Reference Librarian* 63, no. 3 (July 3, 2022): 102–17, https://doi.org/10.1080/02763877.2022.2100559.

52. Joe Kohlburn, Jenny Bossaller, Hyerim Cho, Heather Moulaison-Sandy, and Denice Adkins, "Public Libraries and COVID-19: Perceptions and Politics in the United States," *The Library Quarterly* 93, no. 1 (January 1, 2023): 7–25, https://doi.org/10.1086/722547; Catherine Lockmiller, "Decoding the Misinformation-Legislation Pipeline: An Analysis of Florida Medicaid and the Current State of Transgender Healthcare," *Journal of the Medical Library Association* 111, no. 4 (October 2, 2023): 750–61, https://doi.org/10.5195 /jmla.2023.1724.

53. Bharat Mehra and Joseph Winberry, "Politic Talks' in Academic Libraries of the South to Address a Global Democracy Recession in the United States: An Exploratory Website Analysis," in *Libraries and the Global Retreat of Democracy: Confronting Polarization, Misinformation, and Suppression*, ed. Natalie Greene Taylor et al., Advances in Librarianship 50 (Bingley, UK: Emerald Publishing Limited, 2021), 183–210, https://doi.org/10.1108 /S0065-283020210000050008.

54. Zoë Abbie Teel, "Guardians of Freedom: Examining Privacy, Censorship, and Government Legislation in Collection Development," *The Serials Librarian*, September 27, 2023, 1–6, https://doi.org/10.1080/0361526X.2023.2245862.

55. Michael Dudley and John Wright, "The Role of Multidimensional Library Neutrality in Advancing Social Justice: Adapting Theoretical Foundations from Political Science and Urban Planning," *Journal of Intellectual Freedom & Privacy* 7, no. 3 (2023), https://doi .org/10.5860/jifp.v7i3.7840.

56. Steve Rosato, "Legally Speaking—Banning Bans, aka What's Happening in Illinois," *Against the Grain* (blog), September 30, 2022, https://www.charleston-hub.com/2023/11 /legally-speaking-banning-bans-aka-whats-happening-in-illinois/.

57. Annis Lee Adams, "Anti-Racism Resources," *Public Services Quarterly* 17, no. 2 (April 3, 2021): 104–11, https://doi.org/10.1080/15228959.2021.1898519.

58. Leta Hendricks and Gene Springs, "Amplifying Antiracism Resources through Intra-University Collaboration," *Collaborative Librarianship* 13, no. 1 (April 15, 2022), https:// digitalcommons.du.edu/collaborativelibrarianship/vol13/iss1/6.

59. Qing H. Stellwagen and Steven Bingo, "Supporting an Inclusive Campus Community: An Academic Library's Co-Sponsorship of Asian American and Native Hawaiian/ Pacific Islander Heritage Month Celebrations," *Journal of Library Administration* 63, no. 3 (April 3, 2023): 358–70, https://doi.org/10.1080/01930826.2023.2177926.

60. Silvia Vong, "Not a Token! A Discussion on Racial Capitalism and Its Impact on Academic Librarians and Libraries," *Reference Services Review* 50, no. 1 (March 2, 2022): 127–47, https://doi.org/10.1108/RSR-06-2021-0024.

61. Ann Glusker, Celia Emmelhainz, Natalia Estrada, and Bonita Dyess, "Viewed as Equals': The Impacts of Library Organizational Cultures and Management on Library Staff Morale," *Journal of Library Administration* 62, no. 2 (February 17, 2022): 153–89, https://doi.org/10.1080/01930826.2022.2026119.

62. Adrienne Lu, "Here's What Florida's Proposed Anti-DEI Regulations Would Ban," *The Chronicle of Higher Education*, October 12, 2023, https://www.chronicle.com/article/heres-what-floridas-proposed-anti-dei-regulations-would-ban.

63. Andrew Atterbury, "Florida Joins Conservative States Severing Ties with National Library Group," POLITICO Pro, October 31, 2023, https://subscriber.politicopro.com/article/2023/10/florida-joins-conservative-states-severing-ties-with-national-library-orga nization-ala-00124516; Madalaine Elhabbal, "Montana State Library Commission Breaks Ties with American Library Association Over New President," *Catholic Vote* (blog), July 11, 2023, https://catholicvote.org/mt-state-library-commission-breaks-ties-with-ala/.

64. Shannon M Oltmann, Toni Samek, and Louise Cooke, "Intellectual Freedom: Waving and Wavering across Three National Contexts," *IFLA Journal* 48, no. 3 (October 2022): 439–48, https://doi.org/10.1177/03400352221085294.

65. Raymond Garcia, "American Library Association Reports Record Number of Demands to Censor Library Books and Materials in 2022," ALAnews, March 2023, https:// www.ala.org/news/press-releases/2023/03/record-book-bans-2022.

66. Diana Castillo and Kelly McElroy, "Solidarity Is for Librarians: Lessons from Organizing," *In the Library with the Lead Pipe*, August 24, 2022, https://www.inthelibrarywith theleadpipe.org/2022/solidarity/.

67. David Baca and Lamoya Burks, "Tenure, Critical Race Theory + Academic Libraries," *Texas Library Journal* 98, no. 2 (2022): 60–61.

68. Ryan Quinn, "Report: Higher Ed Unions and Strikes Surged in 2022, 2023," *Inside Higher Ed*, September 1, 2023, https://www.insidehighered.com/news/quick -takes/2023/09/01/higher-ed-unions-strikes-surged-2022-2023.

69. Colleen Flaherty, "When Librarians Unionize," *Inside Higher Ed*, January 11, 2022, https://www.insidehighered.com/news/2022/01/12/northwestern-librarians-unionize -following-furloughs-cuts.

70. Emily Drabinski, "Facing Threat of Far Right Violence, Library Workers Seek Safety in Unionization," Truthout, December 16, 2022, https://truthout.org/articles/facing-threat -of-far-right-violence-library-workers-seek-safety-in-unionization/.

71. Liam Knox, "School Starts With a Strike at American University," *Inside Higher Ed*, August 22, 2022, https://www.insidehighered.com/news/2022/08/23/american-u-staff -strike-higher-wages.

72. Flaherty, "When Librarians Unionize."

73. Castillo and McElroy, "Solidarity Is for Librarians."

74. Josh Moody, "Texas A&M Weighs Sweeping Changes to Library," *Inside Higher Ed*, May 15, 2022, https://www.insidehighered.com/news/2022/05/16/texas-am-considers -making-sweeping-changes-library.

75. Amy F. Fyn, Amanda Foster Kaufman, and Christina Heady, "Academic Librarian Turnover and Leadership Amidst the Great Reshuffle," in *Forging the Future: ACRL 2023 Proceedings* (Chicago: Association of College & Research Libraries, 2023), https://www.ala .org/acrl/conferences/acrl2023/papers, p. 2.

76. Amy McLay Paterson, "Just The Way We've Always Done It': Who Shapes The New Normal for Academic Libraries?," *Canadian Journal of Academic Librarianship / Revue Canadienne de Bibliothéconomie Universitaire* 8 (2022): 1–25, https://doi.org/10.33137 /cjal-rcbu.v8.38476, p.15.

77. Andrea Falcone and Lyda Fontes McCartin, "Strategies for Retaining and Sustaining the Academic Librarian Workforce in Times of Crises," *Journal of Library Administration* 62, no. 4 (May 19, 2022): 557–63, https://doi.org/10.1080/01930826.2022.2057132.

78. Fyn, Kaufman, and Heady, "Academic Librarian Turnover and Leadership Amidst the Great Reshuffle."

79. Matthew Weirick Johnson and Sylvia Page, "What's in a Workload? Affect, Burnout, and Complicating Capacity in Academic Librarians," in *Academic Librarian Burnout: Causes and Responses* (Chicago: Association of College & Research Libraries, 2022), https:// escholarship.org/uc/item/6w86w41v, p. 52.

80. Johnson and Page, "What's in a Workload?"

81. Ashlea Green, "Academic Library Employees and Their Work Modality Options and Preferences," *The Journal of Academic Librarianship* 49, no. 5 (September 1, 2023): 102764, https://doi.org/10.1016/j.acalib.2023.102764, p. 1.

82. Green, "Academic Library Employees and Their Work Modality Options and Preferences"; Daniel Pfeiffer, "New Data Reveal the Future of Remote Work in Libraries," *Choice 360* (blog), February 5, 2024, https://www.choice360.org/libtech-insight/new-data-reveal -the-future-for-remote-work-in-libraries/.

83. Joshua Kim, "Hybrid Work and the University Conversations We Need to Have," *Inside Higher Ed* (blog), July 21, 2023, https://www.insidehighered.com/opinion/blogs /learning-innovation/2023/07/21/hybrid-work-and-university-conversations-we-need-have.

84. Anne-Laure Fayard, John Weeks, and Mahwesh Khan, "Designing the Hybrid Office," *Harvard Business Review* 99, no. 2 (March-April 2021): 114–23.

85. Marijel (Maggie) Melo, Kimberly Hirsh, and Laura March, "Makerspaces in Libraries at U.S. Public Colleges and Universities: A Census," *portal: Libraries and the Academy* 23, no. 1 (January 2023): 35–43, https://doi.org/10.1353/pla.2023.0007, p.35.

86. Melo, Hirsh, and March, "Makerspaces in Libraries at U.S. Public Colleges and Universities."

87. Emilia C. Bell, Stephanie Piper, and Carmel O'Sullivan, "Users' Experiences in a Regional Academic Library Makerspace," *Journal of the Australian Library and Information Association* 72, no. 2 (April 3, 2023): 135–49, https://doi.org/10.1080/24750158.2023.2 202512.

88. Lawren Wilkins and John DeLooper, "If You Build It, Will They Come? Reflections on Creating a Community College Library Makerspace," *Public Services Quarterly* 17, no. 4 (October 2, 2021): 276–85, https://doi.org/10.1080/15228959.2021.1887049.

89. Alex Watson, "To Thine Own 3D Selfie Be True: Outreach for an Academic Library Makerspace with a 3D Selfie Booth," *Information Technology and Libraries* 42, no. 4 (December 18, 2023), https://doi.org/10.5860/ital.v42i4.15107.

90. Amber Sewell, "Game Jams for Academic Libraries: Lessons Learned from a Collaboration with the Makerspace," *College & Research Libraries News* 85, no. 1 (2024), https://doi.org/10.5860/crln.85.1.23.

91. Megan Tomko, Melissa Alemán, Robert Nagel, Wendy Newstetter, Julie Linsey, "A Typology for Learning: Examining How Academic Makerspaces Support Learning for Students," *Journal of Mechanical Design* 145, no. 9 (September 1, 2023): 091402, https://doi.org/10.1115/1.4062701, p. 9.

92. Bala Haruna and K. Kiran, "Intrinsic Motivation as a Determinant of Perceived Usefulness of Library Makerspace: The Influence of Learning Dimensions," *Malaysian Journal of Library and Information Science* 28, no. 1 (May 11, 2023): 15–34, https://doi.org/10.22452/mjlis.vol28no1.2.

93. Sewell, "Game Jams for Academic Libraries."

94. Sarita S. Rajan, Mohamed Esmail, and Mohamed Musthafa K., "Repositioning Academic Libraries as a Hub of Technology Enhanced Learning Space: Innovations and Challenges," *Library Philosophy and Practice*, January 10, 2022, https://digitalcommons.unl.edu/libphilprac/6694.

95. Jad A. Elharake, Faris Akbar, Amyn A. Malik, Walter Gilliam, and Saad B. Omer, "Mental Health Impact of COVID-19 among Children and College Students: A Systematic Review," *Child Psychiatry & Human Development* 54, no. 3 (June 1, 2023): 913–25, https:// doi.org/10.1007/s10578-021-01297-1.

96. Marta Bladek, "Student Well-Being Matters: Academic Library Support for the Whole Student," *The Journal of Academic Librarianship* 47, no. 3 (May 1, 2021): 102349, https://doi.org/10.1016/j.acalib.2021.102349.

97. Liz Brewster and Andrew M. Cox, "Taking a 'Whole-University' Approach to Student Mental Health: The Contribution of Academic Libraries," *Higher Education Research* & *Development* 42, no. 1 (January 2, 2023): 33–47, https://doi.org/10.1080/07294360.2 022.2043249.

98. Sheila Corrall, "The Social Mission of Academic Libraries in Higher Education," in *The Social Future of Academic Libraries: New Perspectives on Communities, Networks, and Engagement*, ed. Paul Bracke, Sheila Corrall, and Tim Schlak (London: Facet, 2022), 109–48, https://doi.org/10.29085/9781783304738.007.

99. Yujin Kim and Eunhwa Yang, "Academic Library Spaces and Student Activities during the COVID-19 Pandemic," *The Journal of Academic Librarianship* 48, no. 4 (July 1, 2022): 102529, https://doi.org/10.1016/j.acalib.2022.102529.

100. Brendan Johnson, "Using the Physical Academic Library to Cope with Academic Stress," *Journal of Library Outreach and Engagement* 3 (September 7, 2023): 35–49, https://doi.org/10.21900/j.jloe.v3.956.

101. Megan Hodge, "Library Mood: Re-Creating the Library Experience from Home," *portal: Libraries and the Academy* 22, no. 1 (January 6, 2022): 227–40, https://doi.org /10.1353/pla.2022.0002.

102. Pauline Dewan, "Leisure Reading as a Mindfulness Activity: The Implications for Academic Reference Librarians," *The Reference Librarian* 64, no. 1 (January 2, 2023): 1–16, https://doi.org/10.1080/02763877.2022.2156968.

103. Selenay Aytac and Diane Mizrachi, "The Mindfulness Framework for Implementing Mindfulness into Information Literacy Instruction," *The Reference Librarian* 63, no. 1–2 (April 3, 2022): 43–61, https://doi.org/10.1080/02763877.2022.2030273.

104. Susan Carter, Cecily Andersen, Michaell Turner, and Lorraine Gaunt, "What about Us? Wellbeing of Higher Education Librarians," *The Journal of Academic Librarianship* 49, no. 1 (January 1, 2023): 102619, https://doi.org/10.1016/j.acalib.2022.102619; Maryellen Nash, Barbara Lewis, Jessica Szempruch, Stephanie Jacobs, and Susan Silver, "Together, Apart: Communication Dynamics among Academic Librarians during the COVID-19 Pandemic," *College & Research Libraries* 83, no. 6 (November 2022): 946–65, https://doi.org/10.5860/crl.83.6.946.