Reference & User Services Quarterly

The Journal of The Reference and User Services Association (RUSA)

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Beyond Face Value: Evaluating Research Consultations from the Student Perspective Changing the Venues but not Changing Our Tune: Service Model Transition at a Music and Performing Arts Library Where's the EASY Button? Uncovering E-Book Usability

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Listening to Advisors

A Conversation About Readers' Advisory Services, Practice, and Practicing

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Interviews conducted and compiled by Neal Wyatt, contributing editor and readers' advisory columnist for Library Journal.

s RA service has moved from its second-wave renaissance during the late twentieth century/ early twenty-first century (with a steady stream of reference tools, conference programming, and think pieces) into an often underpromoted but bedrock mainstay of the public library, what do advisors continue to discuss among themselves and see as areas of need? If you could gather a handful of advisors together, over a cup of coffee one rainy morning before book group began, what would they talk about? What would they ask each other? What do they know to be foundational about the service? As important, what might they suggest we all re-think? This column invites you to eavesdrop on such a conversation. It was conducted over email between six advisors: two at the start of their careers, two helping to define the field, and two who have lead the way for librarians, for a combined eight decades. These advisors share research, hard-won and livedin lessons, showcase the luminous nature of RA work as well as its difficulties, propose a change for RA education, and, of course, each suggests a book to read.

While the conversation (which has been condensed and edited) began with a set of prompt questions ranging from best practices to RA education, it quickly became clear that the subjects on the minds of everyone centered on four key topics: RA education, common challenges, building readeruseful displays, and the importance of RA in libraries and our reading lives.

ADVANCING RA EDUCATION: MAKE IT APPLICABLE

How can RA in the classroom better equip librarians for the service desk?

Kim Tipton: A written assignment is good for RA, but I had days and days to craft the perfect answers. The real reference desk isn't like that—it's much more stressful. The patron is standing there, maybe impatiently. You're searching online sources while trying to ask them thoughtful questions. The phone might start ringing. Conducting RA on the fly during class would have been a more spontaneous interaction and given us the chance to practice. Another practical assignment is to visit a local library and ask a librarian to recommend a book, as a secret shopper. Paying attention to what questions we get asked, what resources they use, then reflecting on the interaction and what we thought was helpful, what we might have done differently, etc., would also be highly

THE CONVERSATIONALISTS

Katharine Janeczek, Children's and Young Adult Librarian, Forbes Library, Northampton (MA)

A word of advice: "It is important to give the process of RA time and space. I think it's very beneficial to give the patron moments to express themselves, as well as evaluate and reevaluate what they're looking for. It's so easy to overfill silences in the moment, and those pauses might be useful for internal processing, or provide a gateway to a patron thinking out loud in a way that leads to a more favorable Reader's Advisory fit."

Lynn Lobash, Associate Director, Readers Services, New York Public Library

A word of advice: "Take a few minutes before the library opens and browse your collection. It is important to have a fresh picture of what is on your shelves every day. Maybe one of your favorites was returned and is ready for another reader, or maybe one of your go-tos is out and you need to identify an alternative. This is especially true when working with a floating collection."

Catherine Sheldrick Ross, FRSC, Professor Emerita, Faculty of Information and Media Studies, University of Western Ontario

A word of advice: "Start with the reader and with what the reader says about the reading experience that is desired. The goal of readers' advisory work is not to improve reading taste or to get more people reading the classics or to push people up the reading ladder. The purpose is to help connect readers with the materials that they will engage with and enjoy. When you start with the reader, you avoid the pitfall of thinking of the book as something existing apart from any reader that can be ranked on a hierarchy of quality from low to high."

Joyce Saricks, retired readers' advisor, author of *Readers' Advisory Service in the Public Library*, and passionate fan of audiobooks.

A word of advice: "Understand how personal an interaction this is and how carefully, thoughtfully, we need to consider every interaction. RA isn't just throwing out a stack of books and hoping something works. Listen to what readers say and explore with them the possible suggestions. It's not what we love but what they want. This listening is a skill that helps in all our interactions—in the library and in life."

Kim Tipton, Adult Services Librarian, Crystal Lake Public Library (IL)

A word of advice: "I used to think that RA was simply helping the patron find a book similar to one they'd already read. Now I know it encompasses so much more than that: the teacher who needs books on a topic to supplement her class materials; the parent who brings their child in and does all the talking for the child; putting up a book display and choosing (or not choosing) books for it; or addressing the parent who wants to censor what their child reads."

David Wright, Reader Services Librarian, Seattle Public Library (WA)

A word of advice: "When it comes to RA, *People First, Then Books*. Your ability to relax, listen and enthuse with others is key. The rest can always be picked up later, and there are great tools to help you with connecting readers with books: Use Your Tools!"

useful. I think it's important to teach us to see the RA interaction all the way through and really engage the patron. There should be more focus in classes on the human interaction. I've seen librarians use a variety of print and online sources, print a list of suggested titles for the patron, and consider the interaction over.

Katharine Janeczek: Most of my readers' advisory experience has been gleaned from in-person interactions with patrons. Adding a practical element to instructional programs would be extremely valuable, as the personal experience of RA is very different from reading about it, or even discussing it. Of course, it's not possible to replicate in-person interaction exactly as it would occur in a library setting, but some sort of mock RA exercise in class could be a great way of getting practice and gaining confidence. I remember answering mock reference questions in Information Sources and Services, and I think adding something similar for the purposes of practicing RA would be helpful, and also emphasize how important it is to develop readers' advisory skills.

David Wright: One scenario to try that is very reflective of real practice for novice and seasoned readers advisors alike would be to deliberately blindside the advisor with questions that focus on those areas or genres that they feel the least

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comfortable or familiar with. Perhaps multiple times. The point being not to humble advisors, but to help them consciously develop strategies for coping with this very common scenario, both emotionally in how to maintain composure and lean into the patron rather than backing away, and also in making use of tools in ways that feel legitimately helpful, and add value for the reader. I suppose the real masters level version of this exercise—although it is probably too elaborate to work well in real life—would be to have the questioner make up an imaginary genre that they like. In this case, no tools will help at all, and the advisor needs to learn to engage the patron to learn more about their taste—a good strategy even when we feel much more familiar with what a reader likes, but perhaps not with why they like it.

Joyce Saricks: Any exercise that compels us to talk about books makes us better. We started staff meetings by sharing a title we were reading. It gave us a chance to practice what we might say and to see what lines worked and didn't. When I taught, students always wrote a reader profile-and discovered it is harder than you might think to describe concisely what you enjoy and don't and why. No wonder readers are mum when we ask for that info! Students exchanged their profiles with another student, and suggested titles for each other. I think practicing talking about books is the key, and the more we do it, the better we are at it and the more natural it becomes. If you're also working in a library while in school, you can make that part of your routine in quiet moments on the desk with a colleague but also out in the world. I'm still stopped by people in the grocery store curious about what I'm listening to now-they remember me from the library and ask. If I were to plan a series of exercises, I'd start with talking about books, progress to the reader profile, and then face-to-face interviews with fellow staff members. That makes a less intimidating first step and builds skills and comfort.

Catherine Sheldrick Ross: The third edition of *Conducting the Reference Interview* offers guidance on this topic with exercises on a series of scenarios—statements from real readers and drawn from my interviews with avid readers. One person plays the role of the "reader" and uses one of the scenarios as the basis for playing the reader role. The reader doesn't spill the beans all at once but answers questions about reading preferences only in response to questions asked by the readers' advisor. Readers' advisors ask questions from the provided list of "Some Questions for Readers' Advisors."

RA PROBLEMS: BLANKING OUT AND LEARNING GENRES

The two issues that seem to worry advisors most are fear of drawing a blank and keeping up with genres. Catherine Sheldrick Ross has research data expressing these concerns.

Catherine Sheldrick Ross: Between Winter 2002 and Fall 2009, I sent MLIS students at Western University into libraries to ask for help in finding "some good books to read." Too often the scenario went something like this: the reader said that they enjoy poetry or science fiction or books with strong female characters or African American authors or a book "just like X." In the unsuccessful transactions, the staff member often seemed to panic, bypassed the RA interview, and said something like "I'm afraid that I'm no expert in poetry" or "You can browse the shelves and look for the Science Fiction icon" or "I'm sorry but I've never read book X" or "I'm not very familiar with African-American authors/ holocaust novels/true life stories of extreme adventure, but maybe if you browse over there you'll find something." In general, the summary of the questionnaire data suggests that staff members wanted to be helpful-85 percent were described as pleasant and friendly-but too many lacked the particular training needed to actually be helpful. When the readers' advisory transaction was unsuccessful, some specific training gaps are indicated (and both relate to drawing a blank and keeping up with genres):

- The ability to find out, specifically, what kinds of books the user would enjoy (i.e., the RA interview)
- Insufficient familiarity with the range of genres that interests readers
- Insufficient use of professional readers' advisory tools and a tendency instead to rely on personal knowledge.

David Wright: Twenty years in, I definitely still have plenty of blank moments, and I don't know any readers' advisors who don't, really. I think there are a few tricks that I and my colleagues routinely rely on-a kind of manual override to the initial panic you may be feeling at a reader whose interests may be hard to draw out, or outside one's own realm of experience or powers of recall. One is to take-or feignsuch a deep interest in the patron and their own interests that you just jump into the interaction fully as if launching into a voyage of discovery, or meeting a new friend. When your immediate reaction is to express interest and less-thancreepy levels of enthusiasm, it gives you room to play-room to hear what they're telling you. It also puts them on the spot a bit, which gives you something in common: here we are, both on the spot! Let's muddle through this together, and see what we can come up with! Playfully muddling through is I think a good way to think of it, less threatening for both parties. Best not to wait for that attitude to magically happen, though: just fake it 'til you make it, really. Finding tricks to override the perfectly natural tendency to panic is key, I think, to being able to have fun in the work.

Lynn Lobash: I would never claim I can recommend a book off the top of my head every time. I rely heavily on NoveList in my job. Sometimes you can't remember a title, or you just haven't heard of any of the books the patron says they liked.

Joyce Saricks: In more than twenty years on the RA desk, I never conquered the-mind-goes-blank syndrome, I just worked out ways to compensate. Remember that any handouts/lists you can share with the reader also help. We want to narrow the possibilities from "I just want a good book" and get into the ballpark of what might please that reader today. Lists and read-alikes help the reader identify what might work.

Kim Tipton: If I have a colleague at the desk with me, and if they're a big reader, I'll bring them in to help suggest something. For a long time, my library had a list of staff who read heavily in certain genres. We all knew it was OK to lean on each other for help. If I'm at the desk alone, I go right to the internet and use either the library's RA databases or popular sites with lists.

RA PROBLEMS: KEEPING UP WITH GENRES

Lynn Lobash: This is a tough one. You have to learn the subgenres, their themes, and appeals. I already mentioned NoveList and can't overestimate its value for me. I also like *Literary Hub* for keeping up on reviews. If you look at their sub-site, *Book Marks*, and click on "all categories" at the top you will find new books by genre plus an aggregation of reviews.

Joyce Saricks: Keeping up is hard. I think we have to try to read as broadly as we can-both books and reviews-and glean information from every source we have including library publications, popular magazines, podcasts, etc. Fans of a particular genre are often a great source of information on the state of the genre as well as authors and titles the library should have and we should be familiar with. We can't read everything but we do need to make a concerted effort to read as much as we can about titles and genres. Talk with readers, with fellow staff members, with colleagues about what they're reading; check reserve queues to identify hot new authors and titles; keep track of genres and the most popular authors within them and read or familiarize yourself with them. It's continuing education that never ends but often provides unexpected pleasures in the serendipitous discovery of interesting titles to share with readers.

RA ANSWERS: MAKE READER-USEFUL (NOT PRETTY) DISPLAYS (AND MAKE A LOT OF THEM)

If RA has a magic bullet it seems to be displays.

David Wright: Physical libraries need to do attractive collection marketing. Libraries that don't do it, or don't do it well are just profoundly less reader friendly. It's less about which books are chosen, let alone which theme, than about creating ways for people to better relate to books (and, while browsing, relate to us and to the library as a whole). Libraries that look more like bookstores, with face outs and end caps and various displays, are really helping their patrons a lot. And while I say that themes aren't essential, some can really be expressive of a library's goals, such as having displays that celebrate and reflect the diversity of your patrons. Some high concept displays are basically mini-programs: Blind-Date-With-A-Book display, ones with gift-wrapped books that readers don't see until they take them home and unwrap them: that's a wonderful experience to give people—the gift of uncertainty, of mystery, of taking a chance.

Lynn Lobash: Collection merchandising should get more emphasis. For every one person that approaches a librarian to ask for a suggestion, there are many with whom we will never have a conversation. Displays, staff picks, shelf talkers, even face outs can serve as recommendations for these patrons. However, I think we need a paradigm shift in how librarians are trained to do collection merchandising. Librarians are trained to think top-down when it comes to displays. They start with a theme, create a clever sign, maybe add some props, and often order the books they need for the display. These displays take a long time and are difficult to replenish. I think we have a lot to learn from retail. I want to see many displays, in every section of the library, built from the collection up. Small displays in shelves, books on tables, books on the circulation desk, everywhere you turn, a display. Some of my favorite tricks of the trade include a simple display of highly recognizable and somewhat current titles on a table near the circulation desk. This is a great opportunity to upsell patrons waiting in line to check out. I love a media cross over display near public computers. I like a display of long-form journalism books in the spot where your newspaper readers tend to gather. Finally, I like to make a display for parents and caretakers in the kid's section. My all-time favorite is a staff pick display. Or better yet, staff picks + shelf talkers littered throughout the collection.

Katharine Janeczek: I've found displays to be a valuable form of passive reader's advisory. They change the aspects of the collection that patrons interact with, and can amplify underused or potentially unknown materials. Providing multiple modes of access to services is an important function of libraries today, and displays are a great way to make reader's advisory a patron-driven process.

Kim Tipton: Don't just use books, DVDs and music CDs work too. I look for diverse titles and authors, books in different languages. Our end caps fit about six items at a time, but I keep a basket handy with more titles and invite staff to fill in too. The displays create awareness around an issue, give patrons reasons to linger and browse, and introduce patrons to new authors and genres.

READERS' ADVISORY

RA IS FUNDAMENTAL: TO LIBRARIES AND TO READERS

RA is about people, helping them, connecting with them, learning with them.

Catherine Sheldrick Ross: It is increasingly recognized that RA is not just a nice thing to do but something that is central to the public library's mission: finding out what kind of reading experience the particular reader wants at a particular time in his or her life. A well-executed RA transaction offers this extra value: a personalized and tailored service that is responsive to what the individual reader wants to read, view, or listen to.

Joyce Saricks: Libraries are storehouses for stories of all kinds, both fiction and nonfiction, in a wide range of formats. And readers' advisors are the keys to this storehouse, this world of stories. We're the ones who make them available and who identify what might satisfy readers. Stories intrigue, satisfy, send us on the paths of new discoveries, confirm our beliefs and challenge them. Stories—and our libraries—offer something for everyone, and as long as stories exist, libraries will need dedicated staff to share them with readers.

Katharine Janeczek: I think that there's perhaps a mentality of RA being the icing on the cake, a fun task, but it's really a very valuable, marketable aspect of library services. Letting the public know that this is something libraries provide, and that this is an essential part of reference, is significant. Finding the joy in readers' advisory is, I think, truly important; it should be a fun, flexible, and patron-driven experience. When you can act as a conduit between a patron and a resource that they need or want, that's a special and unique feeling.

WHAT TO READ AND SUGGEST TO OTHERS

To close, each advisor has a book to share:

Katharine Janeczek: Darius the Great Is Not Okay by Adib Khorram was one of my favorite YA books of 2018. Darius calls himself a "fake Persian" in uncertain moments as he grapples with his identity within in his family, and within the world at large, as a gay, teenage Iranian-American with depression. The feeling of potentially not being real, not being of this world, or not fitting in the place you were told you should belong, runs beautifully throughout the book. Share it with teens and adults who've doubted their own reality at one point in time, and who enjoy nuanced coming-ofage tales from an honest and tender narrator. There are many different types of love in this book, and Khorram brings it all to life for us, in both light and heavy moments. **Lynn Lobash**: I am currently reading *Golden Child* by Claire Adam. Opening this book (every time) is like stepping into the home and lives of this family in rural Trinidad. The imagery and the almost vignette-like domestic scenes are stunning. For readers who enjoyed *The Kite Runner* and *Sing Unburied Sing*.

Catherine Sheldrick Ross: For readers who enjoy learning about the natural world at the same time that they are being entertained, I suggest The River of Consciousness, Oliver Sacks's last book. This book is a genre-crosser, combining elements of Sacks's own autobiography, details from the lives of such scientists as Darwin, Freud, and William James, and clearly written accounts of evolving scientific discoveries about topics as diverse as the chemical messengers that direct the growth and movement of plants, disorders of neural speed in people with postencephalitic parkinsonism, and the genius among invertebrates-the octopus-which has half a billion neurons distributed between its brain and its eight arms (in comparison, we learn that the mouse has only 75 to 100 million neurons). The river of consciousness in the book's title points to the kinship and connectedness that Oliver Sacks sees as linking all living things.

Joyce Saricks: Diane Setterfield's *Once Upon a River*. Set along a river very like the Thames in 1880s England, this is an elegantly written, heartwarming, imaginative tale of the rural residents and an eventful year from one winter solstice to the next. Vividly drawn characters, multiple intertwined story lines, families, secrets, and touches of romance and magic make it a good suggestion for a range of readers.

Kim Tipton: *Code Name Verity* by Elizabeth Wein. Verity is a Scottish female spy during WWII who is taken hostage in France by the Gestapo and is being forced to write down her story and give up secrets. Verity tells her story in the form of a diary, creating a sense of intimacy and urgency. This young adult book would appeal to readers who like strong female leads/female friendships and historical fiction. There are two other books in the series (a prequel and a sequel), so if you enjoy this one, be sure to check out the others.

David Wright: *Montana*, 1948 by Larry Watson. It is one of those perfect little books that has appeal for so many different kinds of readers. Its small size and inherent suspense make it a good nonthreatening read for novice readers or perhaps those learning English; the writing is wistful and beautiful but not fancy. It makes a nice change of pace for both crime fiction fans and literary readers. Although it was written by a white male, it touches on issues of race and nicely complements that ubiquitous high school favorite, *To Kill a Mockingbird*. And as I know that librarians are always on the lookout for just that kind of sure bet, I figure it makes a good suggestion for just about anyone who might be reading this—it is a dynamite little book.

Game On to Game After

Sources for Video Game History

Kristen J. Nyitray

Kristen J. Nyitray is Director of Special Collections and University Archives, and University Archivist at Stony Brook University, State University of New York.

Correspondence concerning this column should be addressed to Mark Shores; e-mail: shoresml@miamioh.edu. Kristen Nyitray began her immersion in video games with an Atari 2600 and ColecoVision console and checking out games from her local public library. Later in life, she had the opportunity to start building a video game studies collection in her professional career as an archivist and special collections librarian. While that project has since ended, you get the benefit of her expansive knowledge of video game sources in "Game On to Game After: Sources for Video Game History." There is much in this column to help librarians wanting to support research in this important entertainment form. Ready player one?—*Editor*

ideo games have emerged as a ubiquitous and dominant form of entertainment as evidenced by statistics compiled in the United States and published by the Entertainment Software Association: 60 percent of Americans play video and/or computer games daily; 70 percent of gamers are 18 and older; the average age of a player is 34; adult women constitute 33 percent of players; and sales in the United States were estimated in 2017 at \$36 billion.¹

What constitutes a video game? This seemingly simple question has spurred much technical and philosophical debate. To this point, in 2010 I founded with Raiford Guins (professor of cinema and media studies, the Media School, Indiana University) the William A. Higinbotham Game Studies Collection (2010-2016), named in honor of physicist Higinbotham, developer of the analog computer game Tennis for Two (as it is most commonly known).² This game achieved several landmark firsts in 1958: use of handheld controllers, display of motion, access by the general public, and intent as pure entertainment. However, the word "video" connotes transmittal of a video signal that creates and displays a rasterized image. While Higinbotham's contribution was critical to advancing the domains of games and entertainment, Tennis for Two was not technically a video game because the oscilloscope employed electric voltage and not a raster process.³ *Computer Space* (1971) by Nutting Associates was the first commercial arcade video game. Pong was the first widely successful arcade video game, released by Atari in 1972.⁴ More broadly, a video game is an interactive game experience that uses a device to display graphics on a screen.

Beginning in the 1980s, books and articles about video games were aimed for younger audiences and focused on lineage presented as ordered facts and chronological histories. Despite many diverse areas of intellectual interests, only within the past decade has attention shifted to critical video game historiography.⁵ From concept to production, video

THE ALERT COLLECTOR

games uniquely present a convergence of computer science, the arts, humanities, and social sciences. They are highly complex artifacts. Each component part contributes to the gaming experience and is worthy of study for its impact on social experience and popular cultural history. Examples include source code, ROM cartridges, platforms, controllers, circuits, corporate records, papers of developers, and ephemera such as box-art. The growing community of documentation initiatives has primed and cultivated the progression of works on video games toward transdisciplinary historical and critical studies.6 Contributing to this shift are archival and preservation activities surrounding video game hardware and software, which are paramount for research on technological innovation and to further understanding and appreciation within larger contexts of cultural heritage. Students today are increasingly eager to study games, as new degree programs and course offerings in higher education have been founded in recent years. Major academic publishers have established book series to support academic interests in games.⁷

Coin-op and arcade games, consoles, joysticks, cartridges, and related ephemera provide tangible evidence of shared experiences. Conversely, current popular games such as the cultural phenomena *Fortnite* are played online from anywhere, while app-based games only require a mobile device. This article presents a curated selection of resources on video game history that is reflective and forward-looking. While it is not possible to include all materials worthy of inclusion, the aim is to highlight diverse content that offers historical context, new research, and thought-provoking critical analyses that fosters understanding of video games and their impact on shaping our past, present, and future.

BOOKS

Titles in this section were selected by consulting reviews in *CHOICE*, *Library Journal*, *Publishers Weekly*, and *Booklist*, and by surveying sources found within notes and bibliographies of authoritative texts. The ISBN listed is for the most recent edition of the print format.

REFERENCE

Fox, Matt. The Video Games Guide: 1,000+ Arcade, Console and Computer Games, 1962–2012, 2nd ed. Jefferson, NC: McFarland, 2013. ISBN: 9780786472574.

Fox's expanded, second edition reference guide was published in conjunction with the fiftieth anniversary of the early influential game *Spacewar*! (1962). The author presents in alphabetical order an evaluative overview of video games developed from 1962 and 2012. Particularly useful for research are the several thematic appendixes: a game chronology; a chronology of computers and consoles; a list of programmers and designers; a compilation of annual game awards and awardees; and suggested sources for procuring hardware and software. Herman, Leonard. *Phoenix IV: The History of the Video-game Industry.* Springfield, NJ: Rolenta, 2017. ISBN: 9780964384804.

Touted as the first comprehensive book on video games, *Phoenix IV*'s chronological narrative carefully details video game hardware and software, and the development of the industry between 1951 to 2015. Author Herman first published this reverential book in 1994 as *Phoenix: The Fall and Rise of Videogames.* Now in its fourth edition, much of the content has been rewritten and updated; it encompasses more than 800 pages and features 1,000 illustrations.

Weiss, Brett. Classic Home Video Games,1972–1984: A Complete Reference Guide. ISBN: 9780786469383. Classic Home Video Games, 1985-1988: A Complete Reference Guide. ISBN: 9780786469376. Classic Home Video Games, 1989–1990: A Complete Guide to Sega Genesis, Neo Geo and Turbografx-16 Games. ISBN: 9780786432264. All titles published by McFarland, 2012.

These three comprehensive reference works authored by professional writer Weiss provide documentation of bestselling and lesser-known video games released between 1972 and 1990. The attention to gameplay elements, evaluative content, glossaries, and indexes makes this trio of books noteworthy sources for game research. Arranged alphabetically by console, the 1972–1984 title covers sixteen brands from Adventure Vision to Vectrex; the 1985–1988 work focuses on games designed for Atari 7800, Nintendo NES, and Sega Master System; and the 1989–1990 volume includes Sega Genesis, Neo Geo, Game Boy, and more.

VISUAL HISTORIES

Amos, Evan. *The Game Console: A Photographic History from Atari to Xbox.* San Francisco: No Starch Press, 2018. ISBN: 9781593277437.

Genealogy meets video game history in *The Game Console*. Arranged in eight generations beginning with Magnavox Odyssey (1972) and concluding with Steam Link (2015), author and photographer Amos documents with high quality, full-color photographs of the hardware exteriors and rare views of interiors of eighty-six consoles. The information accompanying each console varies and includes specifications on console creators, launch years, prices, processors, models, and units sold.

Burnham, Van. Supercade: A Visual History of the Videogame Age, 1971–1984. Cambridge, MA: MIT Press, 2003. ISBN: 9780262524209.

Burnham's meticulously researched history of the "videogame age" pays homage to the innovators and technologies instrumental to the development of the industry primarily from 1971 through 1984. Essays and interviews with influential developers and leading scholars set the thoughtfully selected, vibrant, illustrative content in historical context. The oversized dimensions of the book showcases a remarkable amount of primary source materials. Author Burnham is founder and steward of Supercade Collection, one the world's most significant private collections of vintage games.

World Video Game Hall of Fame. *History of Video Games in 64 Objects*. New York: Dey Street Books, imprint of Harper-Collins, 2018. ISBN: 9780062838698.

This work traces milestones in video game history from *Humpty Dumpty* (1947) to *That Dragon, Cancer* (2016) through a highly selective, curated collection of sixty-four objects drawn from the archives at The Strong National Museum of Play. The museum's International Center for the History of Electronic Games (ICHEG) has the most comprehensive assemblage of materials in the world for game research. The book offers in-depth analyses and essays for the objects deemed most reflective of the medium's influence including Roberta Williams' pioneering graphic adventure game *King's Quest* (1984) and Nintendo's Wii Remote (2006), which expanded the genre with its physicality and multigenerational appeal.

HISTORIES

Ackerman, Dan. The Tetris Effect: The Game That Hypnotized the World. New York: PublicAffairs, 2016. ISBN: 9781610396110.

Author and journalist Ackerman examines the riveting international history of *Tetris*, the iconic puzzle game designed by Russian computer scientist Alexy Pajitnov. It details the cultural and industry challenges that influenced its production. Box Brown's book *Tetris: The Games People Play* (London: Self Made Hero, 2017. ISBN: 978-1-62672-315-3) skillfully depicts the game's rich history as a graphic novel with understated artwork reminiscent of the game.

Donovan, Tristan. Replay: The History of Video Games. East Sussex, England: Yellow Ant, 2010. ISBN: 9780956507204.

Many works on videogame history lean toward an "Americentric" perspective and focus on hardware, according to *Replay* author Donovan. To expand the corpus, the book explores the evolution of video games chronologically and geographically from a global perspective with attention given to the underexamined yet transformative Japanese and European influences on development. Quotes and anecdotes culled from 140 interviews are weaved throughout the narrative. The book includes a "gameography" and a glossary that elevates this title to an essential source for video game studies.

Hansen, Dustin. *Game On!: Video Game History from Pong and Pac-Man to Mario, Minecraft, and More.* New York: Square Fish, 2019. ISBN: 9781250294456.

Predicated on the idea that video games are relatively "super young" and therefore an accessible area of research and study, video game designer and author Hansen draws upon his personal and professional video game experiences to enthusiastically chronicle in 39 chapters the history of games from *Pong* to *Angry Birds*. The book is recommended by *School Library Journal* for students in grade four and up.

Hennessey, Jonathan, and Jack McGowan. *The Comic Book Story of Video Games: The Incredible History of the Electronic Gaming Revolution*. Berkeley, CA: Ten Speed, 2017. ISBN: 9780399578908.

In this entertaining and engrossing graphic novel, author Hennessey and artist McGowan detail the electronic gaming revolution spanning from the origins of early development of computers in government-funded laboratories during World War I, to the transition from arcade games to home consoles, and concluding with current app-based games. With readership aimed for older teens and general readers, the book also spotlights individuals who transformed the global entertainment industry.

Kent, Steve L. The Ultimate History of Video Games: From Pong to Pokemon—The Story Behind the Craze That Touched Our Lives and Changed the World. New York: Three Rivers, 2001. ISBN: 9780761536437.

In thirty chapters, Steve L. Kent presents video game history with an emphasis on early lineage, the US market, and hardware. The book begins with an overview of early amusement games and segues into discussion of industry pioneers, pivotal technological advances, and the interpersonal dynamics that impacted the growth of the industry. Though published in 2001, this accessible work remains a popular title.

CULTURE AND CRITICAL STUDIES

Bissell, Tom. *Extra Lives: Why Video Games Matter*. New York: Vintage, 2011. ISBN: 9780307474315.

According to acclaimed journalist and gamer Bissell, studies of game play are challenging because each interaction is unique, and the ability to re-experience and replicate immersive encounters presents technical challenges. The visceral and emotional responses innate to gaming are central to this book. Blending memoir with criticism, the author discusses platforms, storylines, visualization, and dialogue within the larger framework of advancing games as an art form.

Bogost, Ian. *How to Talk About Videogames*. Electronic Meditations Series. Minneapolis: University of Minnesota Press, 2015. ISBN: 9780816699124.

This collection of twenty essays by scholar, author, and game designer Bogost (Georgia Institute of Technology) brings new dimension to criticism with paradoxical philosophical explorations, e.g., "Games are part art and part appliance, part tableau and part toaster." Rather than suggest instructive dictums to evaluate impact and significance, the

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author shares theoretical frameworks for criticism and by extension (and ironically), of criticism itself. Other titles by Bogost include *Persuasive Games: The Expressive Power of Videogames* (2007) and *How to Do Things with Videogames* (2011).

Ervin, Andrew. Bit by Bit: How Video Games Transformed our World. New York: Basic Books, 2017. ISBN: 9780465039708.

Writer and critic Ervin deftly surveys video games from the 1950s to the present and summons attention to the multi-dimensionality and diversity of the medium. Drawing from primary sources, interviews with creators, and his own personal experiences engaging with games, the author traces the technological milestones, business histories, and artistic geniuses that have advanced and amplified the impact of video games on culture, media, and art, and on society as a whole.

Guins, Raiford. *Game After: A Cultural Study of Video Game Afterlife.* Cambridge, MA: MIT Press, 2014. ISBN: 9780262019989.

"What happens to video games when they are out of date, broken, nonfunctional, or obsolete? Should a game be considered an 'ex-game' if it exists only as emulation, as an artifact in museum displays, in an archival box, or at the bottom of a landfill?" In this scholarly work, media historian Guins explores the life cycle and afterlife of video games after they have served their immediate, utilitarian use as objects of entertainment and play.

Kocurek, Carly A. Coin-Operated Americans: Rebooting Boyhood at the Video Game Arcade. Minneapolis: University of Minnesota Press, 2015. ISBN: 9780816691838.

Cultural historian Kocurek (Illinois Institute of Technology) investigates the influences that contributed to the game industry's construct of a "technomasculine" narrative over time. Written from the perspective of why boys and men have been the focus of industry attention, rather than why girls and women have been excluded, the author surveys the gendering of gaming through the arcade experience, violence in games, gaming competitions, and the representation of gamers in media and advertising.

Lowood, Henry, and Raiford Guins, eds. *Debugging Game History: A Critical Lexicon*. Cambridge, MA: MIT Press, 2016. ISBN: 9780262034197.

Through diverse historiographies and analyses, editors Lowood (Stanford University) and Guins (Indiana University) establish a lexicon to advance discourse surrounding video game history. By "debugging" prevalent approaches to game studies, the authors seek to catalyze a shift from the chronicle format to critical studies. Arranged in alphabetical order, essays from established and emerging scholars explore game related topics and concepts drawn from etymology to media archaeology, e.g., "adventure," "controller," "fun," and "game glitch." McGonigal, Jane. *Reality Is Broken: Why Games Make Us Better and How They Can Change the World.* New York: Penguin, 2011. ISBN: 9780143120612.

Grounded in sociological, psychological, and game studies research, game designer and scholar McGonigal examines the significance of games in society and suggests they can transcend the entertainment genre to foster happiness. The author theorizes the same skills and tactics required to achieve advancement in gaming environments can be reimagined and applied to problem-solve and address a wide spectrum of universal societal issues from medical to social.

Montfort, Nick, and Ian Bogost. *Racing the Beam: The Atari Video Computer System*. Cambridge, MA: MIT Press, 2009. ISBN: 9780262012577.

Racing the Beam was the first book published in MIT's Platform Series, which investigates and interrogates foundations of digital media. Scholars and critics Montfort and Bogost (the series' editors) deconstruct the specifications of the Atari VCS and six game cartridges. They present both an instructive and a humanistic study of how scientific and engineering limitations spurred creativity and innovation among a team of developers and programmers, and the impact of the platform on computing, game design, and culture.

INDUSTRY

Harris, Blake J. *Console Wars: Sega, Nintendo, and the Battle That Defined a Generation.* New York: Dey Street, 2015. ISBN: 9780062276704.

Named a best book in 2015 by NPR, Slate, and Publishers Weekly, Harris traces the behind-the-scenes corporate drama that fueled the rivalry of video game industry underdog Sega, led by Tom Kalinske's bold leadership beginning in 1990, in response to rival Nintendo's monopoly of the video game market. Culling from hundreds of interviews and meticulous research, this work underpins the technical, global, and interpersonal dynamics that shaped and defined this distinct console war.

Kushner, David. Masters of Doom: How Two Guys Created an Empire and Transformed Pop Culture. New York: Random House, 2004. ISBN: 9780812972153.

This highly acclaimed and compelling book by awardwinning journalist Kushner details the true story of video game developers and pioneers John Carmack and John Romero, the forces behind landmark games and franchises DOOM and Quake series. The author documents the interpersonal and professional dynamics that brought the two together and the indelible marks they have left on the gaming, software, and entertainment industries. Schreier, Jason. Blood, Sweat, and Pixels: The Triumphant, Turbulent Stories Behind How Video Games Are Made. New York: Harper Paperbacks, 2017. ISBN: 9780062651235.

What is the journey of a video game from concept to production? In this national best-seller, author and journalist Schreier shares untold stories within the domain of development and delves into the seemingly Herculean efforts required to produce video games. Five obstacles discussed are interactivity, advances in technology, changes in tools, scheduling challenges, and the practical consideration that the fun level of a game cannot be assessed until it is played. The book describes the highs and lows experienced by developers, artists, and financial backers through the strugglefraught histories of ten games.

ART

Lapetino, Tim. Art of Atari. Mount Laurel, NJ: Dynamite Entertainment, 2016. ISBN: 9781524101039.

Art of Atari documents the specialty artwork (prototypes to published) commissioned by Atari for the packaging and marketing of its products. Founded in 1972, Atari manufactured arcade games, pinball machines, home game consoles, video games, and computers. This retrospective of Atari's VCS/2600 games offers background information and anecdotes from designers supported by full-color illustrations. Author Lapetino is an award-winning director/ graphic designer and founder of the Museum of Video Game Art (MOVA).

Melissinos, Chris, and Patrick O'Rourke, eds. *The Art of Video Games: From Pac-Man to Mass Effect.* New York: Welcome Books, 2012. ISBN: 9781599621104.

This coffee-table book was companion to *The Art of Video Games* exhibition at the Smithsonian American Art Museum in 2012. With an aim to present gaming as "richly textured emotional and social experiences that have crossed the boundary into culture and art," curator Melissinos and co-author O'Rourke highlight the eighty games featured in the show. The book includes historical background for each game and commentary by video game industry pioneers.

MUSIC

Austin, Michael, ed. Music Video Games: Performance, Politics, and Play. New York: Bloomsbury Academic, 2016. ISBN: 9781501308536.

Music Video Games explores games from the perspective of music as paramount to a player's interactive experience. With this book, editor Austin (Howard University) fills a void in game studies scholarship. The essays are written by contributors with diverse expertise who address composition, musicianship, and cultural impact. Examples include electronic games as precursors and early history (e.g., Simon), to the ubiquitous Rock Band series, to games designed for smartphones. The work has an index of games, a general index, and a glossary of gaming and musical terms.

DIGITAL COLLECTIONS

Several digital initiatives and projects facilitate opportunities to study video games in their original iterations and to engage with vintage games through emulated experiences.

Learning Games Initiative Research Archive (LGIRA) (http://lgira.mesmernet.org)

This interdisciplinary research collective organized by the University of Arizona has developed an impressive repository of digital objects to bring cohesiveness to distributed collections. With preservation and accessibility as missions, the consortium has built a database of 6,300 diverse digital objects (and growing). The content is searchable by keyword and browseable by assigned tags and collection name.

Internet Archive Console Living Room (https://archive.org /details/consolelivingroom)

Through this Internet Archive database and emulator, users can study classic games and engage in retrogaming by playing games developed for home consoles between the 1970s and 1990s. The emulator system does not require any downloads or plugins. Faceted navigation supports refining search results by year, creator and/or manufacturer, and language.

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- 1. "2018 Essential Facts About the Computer and Video Game Industry," Entertainment Software Association, accessed May 12, 2019, https://www.theesa.com/esa-research/2018-essential -facts-about-the-computer-and-video-game-industry/.
- 2. The William A. Higinbotham Game Studies Collection at Stony Brook University contributed directly to the study of video games as popular culture and to their historical longevity. In 2017, the University Libraries decided to discontinue the collection. A majority of the source materials has been relocated.
- 3. "The First Video Game?," Brookhaven National Laboratory, accessed May 19, 2019, https://www.bnl.gov/about/history/first video.php.
- 4. Nick Montfort and Ian Bogost, Racing the Beam: The Atari Video Computer System (Cambridge, MA: MIT Press, 2009), 1.
- 5. Henry Lowood and Raiford Guins, eds., *Debugging Game History: A Critical Lexicon* (Cambridge, MA: MIT Press, 2016), xiii.
- 6. Locations of video game collections and archives are growing and include the Strong National Museum of Play, Library of Congress, Smithsonian Institution, Museum of the Moving Image, Stanford University, University of Texas, University of Illinois, and University of Michigan.
- 7. Several book series have been founded in recent years including Game Studies, MIT Press; Digital Game Studies, Indiana University Press; Studies in Gaming, McFarland; and Bloomsbury, Approaches to Digital Game Studies.

Reference and Information Literacy in the Community College Library

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Library workers from libraries of all types can struggle with the challenges of juggling instructional responsibilities with other assigned duties. Library context can play a key role in the resources available to mitigate these challenges. In this article, Chelsea Contrada discusses information literacy instruction in a community college library context and how that context influences her approach to library instruction. She articulates some of the unique aspects of instruction in community colleges and how community college librarians take a different approach than many of their peers in fouryear colleges and universities. Contrada makes a strong case for increased collaboration across library type and more robust opportunities for professional development and engagement for community college librarians.—*Editor*

ommunity colleges play an important role in the education system. While a college education has seemingly become vital for career success, it is still a privilege that is inaccessible to many. Community colleges offer students of any background, regardless of socioeconomic status, a chance to experience higher education and learn in an accepting and open environment. Community college students, faculty, and librarians often face stigma, as there are many negative stereotypes associated with two-year schools. Community and junior colleges are accused of being less academically challenging than fouryear schools or of being more focused on trades and careers than on academics, but these are misconceptions. The community college provides opportunity to those who need their college experience to be flexible and affordable. They level the playing field so that a college education is something that everyone has the chance to experience.

Community college libraries are unique institutions that combine service and learning through a lens of equity and social justice. They provide access to the resources and services that students need to be academically successful, whether it be technology assistance, research help, computer access, or just a safe and quiet place to study. But are access, service, and safety not the mission of all libraries? This article will share an insider's perspective of community college libraries in an attempt to clear up common misconceptions and explore not only how community college libraries and librarians differ from their other academic colleagues, but also reveal that we all face the same fundamental triumphs and challenges.

COMMUNITY COLLEGES: AN OVERVIEW

Community colleges (or "junior colleges" as they were referred to early on) began in the early twentieth century with the objective of creating a more highly skilled workforce through local education. Since the beginning, community college founders and advocates have supported access to higher education for those who had until then been denied or deemed unworthy based on race, sex, ethnicity, or socioeconomic status.1 Today, community and junior colleges continue that mission while also offering transfer opportunities, certificate options, and workforce development programs. Considering the ever-increasing costs of education and the snowballing student debt crisis, community colleges offer an incredible value: a high-quality education at a reduced cost. For many students, community college is the obvious choice, whether they are looking for a quick path to a career or to save money on a four-year degree.

In the 2016-2017 academic year, 38 percent of undergraduate students attended two-year public colleges and, according to the College Board, 59 percent of students at two-year public institutions graduate with absolutely no debt, a result of low tuition costs and flexible course schedules.² Community colleges are about more than cost savings, however, and are very much about access. Evening, weekend, and online courses make college an option for those who work or support families, and most community college students do. In fact, about 80 percent of community college students work either full or part time.3 Most community colleges have open-door admissions policies, welcoming any student with a high school degree or equivalent. Many high school students are able to earn college credit at community colleges through dual-enrollment programs. Some have robust transfer programs and others are more career-focused; they are really quite diverse and so are their students.

Community colleges are known for providing access to education for historically underserved populations. Demographically, community colleges look different from most four-year schools. Fourteen percent of community college students are black and 22 percent are Hispanic.⁴ The average age of students is a little bit older at community colleges; 28 percent are 30 years or older.⁵ Some of these adults are going back to school after years in the workforce and some are going to college for the first time. Several community colleges are Hispanic Serving Institutions, a designation reached when the number of full-time equivalent students who identify as Hispanic reaches 25 percent or greater.⁶ Each student brings their own unique story with them to community college, resulting in robust class discussions, an emphasis on cultural awareness, and a rich learning experience.

Of course access and diversity are issues close to the heart of most librarians, meaning that work in a community college library can be especially fulfilling. More than a century after the first junior colleges opened their doors to those whom large universities had excluded, the modern community college continues to provide opportunity for historically underserved populations. Each student comes to community college with a story that, more than likely, includes facing adversity and overcoming barriers. The wide range of experiences and learning styles requires that community college librarians be especially tolerant, patient, and empathetic. Flexibility and open-mindedness are essential in community college libraries, as each patron interaction is unique from the next. Specific considerations facing community college librarians are explored below along with a reflection on how community college libraries are providing high levels of service despite some of the more obvious challenges they face.

THE COMMUNITY COLLEGE REFERENCE LIBRARIAN

Due to lower budgets, staff numbers in community college libraries are generally limited. Some smaller schools have just one or two librarians. Larger schools may have more librarians but duties are not always clear cut because the librarians wear many hats. In the community college library, it is quite common to encounter the Reference "and" librarian. For example, "Reference and Collection Development Librarian" or "Reference and Outreach Librarian" are common examples of job titles. Typically, each member of staff with such a title is required to serve time on the reference desk and teach classes while also focusing on other duties behind the scenes.

This also means that things like liaison work are not normally an option. There is rarely enough staff to designate each with a field or trade. Instead, community college librarians must be able to liaise with faculty and students in any field of study. Teaching information literacy classes often requires extra prep work if the librarian is not familiar with research in a given subject. This can be especially true of certain subjects. Nursing and allied health, for example, are among the most popular majors in the country, yet few librarians, community college or otherwise, have formal training in health sciences research.7 The community college librarian must always be willing to learn and develop new skills. Thankfully, since faculty at most community colleges are not required to conduct research or publish their work, almost all of a community college librarian's time can be devoted to student service.

REDUCING ACCESS AND EQUITY BARRIERS

Financial challenges are common among community college libraries; the average annual budget for a community college library is about one fifth that of four-year institutions.⁸ And with enrollment numbers expected to continue to decrease across the country, community colleges, and their libraries, are expected to offer a multitude of diverse resources and services with minimal funds.⁹ What's more, the students are facing their own financial challenges. Choosing a

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community college rather than a four-year institution does save students thousands of dollars, but more than half of community college students are low-income and 33 percent receive Pell Grants for low income students.¹⁰ The price of tuition alone is a barrier, never mind the added costs of transportation, course materials and technology tools. Therefore community college librarians must be creative to provide low-cost programs and services that benefit the library, the campus, and the students.

One example of such services is technology lending. Springfield Technical Community College in Springfield, Massachusetts, for example, has a laptop and wireless hot spot loan program.¹¹ Thomas Nelson Community College in Virginia has a similar program.¹² Students can borrow these items to work on research, assignments, or online courses. Other libraries loan tablets or e-readers for a similar purpose. These types of programs are beneficial to all involved. They provide services to students for whom the difference between passing and failing is internet access. These students might share their experience with friends, increasing library usage. And perhaps most importantly, access to these resources has the potential to improve student success and retention, something that benefits the college, the library, and the students.

Similarly, the open educational resources (OER) movement has seen significant traction and growth due to community college participation. The Community College Consortium for Open Educational Resources (CCCOER) has 88 member institutions.¹³ There are several institutions, such as Austin Community College and several California Community Colleges, that offer zero-textbook cost or "ZTC" degrees. Students in these programs do not have to purchase any textbooks while completing a ZTC degree and as a result save thousands of dollars in educational costs annually.¹⁴

Students are not the only patrons to benefit from the access provided by community college libraries. In some ways, community college librarians are a cross between public and academic librarians. After all, community colleges are public institutions—community institutions—and are therefore open to the public. Community college libraries have the opportunity to interact with the public in special ways and create programming that serves the surrounding communities. Because most students are non-residential, there is an emphasis on local collaboration; programming may include inviting local authors and artists to host talks or workshops. Many community college libraries host community events, collaborate with local public libraries, and loan local museum passes. They also serve public patrons with their collections, including sizeable popular fiction sections and consortia agreements with community libraries. Some community college libraries offer public computer access as well. The mission of community colleges is to educate the community, and librarians play an important role in making that education accessible.

TEACHING INFORMATION LITERACY IN A COMMUNITY COLLEGE LIBRARY

Due to the open-door admissions model at most community colleges, a typical classroom of community college students consists of a wide range of knowledge, experience, learning styles, and educational goals. The same classroom may have students who are new to the English language, students who already have an advanced degree, a student who wants to transfer to a four year school, a student who is only there to satisfy a job requirement, and so on. Community college students are often academically underprepared for the college experience; more than half enroll in developmental courses.¹⁵ Thus, it is quite likely that the students in an information literacy session are completely new to research.

It's also common for students to struggle with digital literacy and access to the technology needed for academic success. According to the Pew Research Center, nearly half of US adults do not have internet access at home and only 17 percent of US adults consider themselves "digitally ready."¹⁶ Not surprisingly, most of those who are "digitally ready."¹⁷ A 2018 study of college students found that 20 percent did not have reliable access to technology, which resulted in lowered grade point averages. Students of color and students of low socioeconomic status were especially vulnerable.¹⁸

This diversity creates fascinating classroom dynamics but also poses a challenge to instructors. This is especially true in a one-shot information literacy class. If a librarian is only given one hour to teach a varied group of students about library services, the research process, citations, and so on, how does one make sure to reach every student? There is no right answer; librarians must consider their student population and community. Each class is different and requires considerable planning, which includes close collaboration with faculty. In my experience, there must be enough time for practice. Lecturing, learning activities, and group work can all hold a place in the classroom, but students need time to feel comfortable with library staff and systems, so handson experience is essential. This is why information literacy must span beyond the one-shot information literacy course.

Community college libraries must offer programming and activities that continue the conversation and offer support to students who did not absorb the information the first time. This can be done with citation and research workshops, online tutorials, one-on-one meetings with librarians, etc. These programs can be tailored for certain levels or student populations. For example, in a 2015 article, Katherine Turcotte suggests community college libraries offer specific services for adult learners like separate instruction classes that could minimize library anxiety and provide a foundation of knowledge of campus technologies like learning management software and Microsoft Office suite.¹⁹ Another study that focused on students with below-proficient information literacy skills suggests that librarians consider a better student-to-instructor ratio to provide students with guidance and feedback in the classroom.²⁰ The methods used by community college libraries will depend on their specific student populations and the preferences of the instructors and librarians. But it is clear that there are often unique circumstances when teaching information literacy in a community college library that must be addressed.

THE FRAMEWORK

It is because of the uniqueness of community colleges that community college librarians often feel left out of major conversations surrounding information literacy at the college level. The specific needs of community college students do not always match the more general needs of the average college student because of the aforementioned gaps in knowledge, limited access to technology, etc. For this reason there has been some controversy surrounding the professional guidelines for teaching information literacy at the college level. Since the Association of College and Research Libraries (ACRL) began sharing drafts of the Framework for Information Literacy for Higher Education in 2014, the reaction from the library community has been varied. The creation of new standards in general triggers discomfort for many and, for some, the new framework feels abstract and perhaps a bit intimidating. This is especially true of community college librarians who feel that the *Framework* is beyond the grasp of students who are brand new to college research. A recent survey of librarians at private and public two-year institutions reveals that the Framework has not been easy to integrate into many community college instruction programs.²¹ Part of the challenge is time restraints; community college librarians cannot find the time to incorporate the ACRL Framework into their short, one-shot instruction sessions.²² In a national survey, 84 percent of librarians who responded expressed interest in professional development opportunities that focus specifically on using the Framework in community college libraries.23

But issues with the *Framework* run deeper; there are questions of where and how the *Framework* connects information literacy with social justice as well as the question of whether it should.²⁴ Since social justice is a core value of community colleges, these questions are especially relevant to community college libraries and should be examined. The fact is, even five years later, it is still too soon to know the extent to which the *Framework* is being effectively utilized in community college library instruction. As it matures and develops, it will be necessary to conduct further investigation on implementation and success of the *Framework* in the community college setting.

TRENDS ON THE HORIZON

Just as any other library, community college libraries must keep up with changing trends and new developments in

technology and academia. Community college enrollment is expected to decline in the coming years.²⁵ This is partially due to reduced high school graduation rates caused by low birth rates during the last economic recession and also due to a boost in the economy (making the workforce, rather than college, an attractive option for adults).²⁶ Colleges are responding by making their academic programs even more flexible via online learning options. As of fall 2017, 33 percent of college students are enrolled in at least one online course.²⁷ In a 2012 report by the Online Computer Library Center (OCLC), community college librarians expect use of online library services to increase.28 As these trends continue, librarians will need to adjust their programs and services to meet the needs of online students. Embedded librarianship as well as digital information literacy initiatives are options to consider.

As mentioned previously, the OER movement is quite strong within community colleges. With recent reports of the merging of two major publishing companies, McGraw-Hill and Cengage, this is expected to continue as the options faculty have for proprietary course materials decrease or combine. Community college students, librarians, faculty and administration recognize the benefits of OER for student success and continue to advocate for implementation. OER is listed as the fifth highest strategic technology in "Higher Education's 2019 Trend Watch and Top Ten Strategic Technologies."29 Community college libraries make excellent support systems for campus-wide OER initiatives, and perhaps we will see more "Reference and OER" librarians in the future. Hopefully community college librarians will continue to find similar ways to promote positive change within their communities and beyond.

CONCLUSION

Community college libraries advocate and work for students; they not only offer resources and services that emphasize the importance of education, they also keep social justice at the heart of their mission by advocating for access and equity. I have experienced community college stigma as both a student and as a professional. I have been told that community college is easier than traditional four-year schools and that what I have to offer to the library community is not relevant. Whenever I face this type of stigma, I cannot seem to understand it. Even though community college libraries have unique populations and needs, fundamentally they exist for the same purpose as all libraries, academic or otherwise: to provide a high standard of service to their communities and beyond.

Of course, we do have differences, but why not see them as positive? Community college librarians are very fortunate because we get to have a direct impact on students who have been told via systems of oppression that they do not belong in college. As long as these systems exist, they will cause divisiveness and inequality. But community college libraries

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foster connection and promote inclusivity. I am calling on all librarians to support this mission and work together to find new ways to help our patrons succeed. Community college librarians have a lot to offer the library community—we also have a lot to learn. Who's ready to get started?

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Going No-Tech, Low-Tech, and High-Tech

Interactive Library Spaces as Passive Outreach

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All photos courtesy of UNO Libraries.

NO Libraries supports University of Nebraska at Omaha's mission to transform and improve the quality of life locally, nationally, and globally through shared values of excellence, engagement, inclusion, discovery, integrity, and university spirit. We do this in part through continuous assessment and development of our learning spaces and environments. We make small changes to ensure our students feel safe, welcome, and at home, and come to see us as a trustworthy, surprising, delightful space. These small changes include developing interactive spaces along a technological continuum so everyone can take ownership of the library in some way.

These careful additions to public spaces, I would argue, are passive marketing and outreach. While these spaces don't necessarily always advertise our services or resources, we want students to feel like the library is their space at the university, and interactivity—in most cases, giving students the opportunity to literally make their mark—is one way to accomplish this. A recent study by Priya Mehta and Andrew Cox investigated the qualities of "homeness," or the feeling of being at home, in libraries. In their study, Mehta and Cox found that a significant percentage of students moved furniture, spread their belongings out, and ultimately found an area they considered to be their space. With these acts of appropriation, the students felt more at home in their university library.¹

When we build passive interactive outreach spaces in the library, we're building relationships and trust. Our unspoken message to our students is, "This is your space." We welcome appropriative actions because we know that when students see themselves in the library they may be more willing to explore, create, and question. They may be more willing to open themselves up to not-knowing and ask questions at our service desks or in consultations with librarians. In this, I agree with David Carr, who writes that "cultural institutions need to inspire trust so the learner can experience risk and yet also experience cognitive change without feeling devastating fear."² We are there to support our students during this time of cognitive change, and it's then that our passive outreach turns active as we help our students with the next step in their learning process.

In this column, I will discuss three different types of interactive library spaces that use varying degrees of technology: the no-tech walk to the coffee shop, the low-tech use of whiteboard paint, and the high-tech video wall.

AMPLIFY YOUR IMPACT

NO-TECH: THE WALK TO THE COFFEE SHOP

For me, a fundamental goal of outreach is to gain the attention and trust of people who wouldn't normally walk into the library or use our resources in person or online. To reach non-users in addition to our regular patrons, I rely on my favorite non-technical library space: the Library Café. Many people, faculty included, see the library as a convenient coffee shop, and I don't begrudge them that opinion-I work with it. The Library Café is located opposite from the main entrance at the other end of our building, and visitors must walk through the entire main floor on their way to get caffeine or lunch and walk back out again. While this walk to and from the café isn't typically known as an interactive space, it is active. This traffic pattern is where we position our displays, pop-up art exhibitions, casual furniture groupings, new books, and (especially for those who think libraries are all about books) interactive spaces for people to communicate with us, with each other, or to just play. The walk to the café is social and it changes often. Our most successful outreach events are held along this thoroughfare; events in rooms just a few feet off this traffic pattern tend to have lower attendance.

If you don't have a high-traffic coffee shop or retail space to ensure traffic flow through your building, you can create the same buzz with interactive displays. Consider installing something that was created in the library or a collection that isn't books, and make sure you place it in sight of, but across from, your main entrance. Go there for your pop-up outreach events. Alternatively, create a pop-up coffee shop as an outreach event to showcase your space.

LOW-TECH: WHITEBOARDS, ART, AND EQUATIONS

Our library leadership team recently painted interactive space directly onto our walls with whiteboard paint. Now called the Idea Wall after the paint that covers it, the whiteboard wall was a creative answer to a problem filled with potential poor optics and high expenses. For many years we had a video wall dedicated to international television shows until the vendor supplying the international feeds began to lose satellites and our eight television feeds died one by one. We, along with our international students, were disappointed that we were losing access to the feeds but couldn't justify the continued upkeep and expense of the television wall. Instead, leadership had a "Why not?" moment and painted the entire wall with whiteboard paint.

Whiteboard paint is an inexpensive alternative to purchasing large whiteboards for meeting spaces and study rooms. Like the University of Central Arkansas, we have painted whiteboards in every library study room with good results.³ We have tried multiple brands of whiteboard paint and as of summer 2019 the whiteboard paint recommended by our facilities department is IdeaPaint. The IdeaPaint Pro line recommends professional installation but our building services department painted the entire wall without any issues. For best adhesion, our building services manager advises beginning with an exceptionally clean and perfectly smooth wall.

We painted the wall late in the spring semester. Within days, people began talking back. At first, we received plain talk about the loss of our international media. We responded directly to students on the whiteboard and emailed concerned professors and staff in our International Programs departments. Once students understood our reason for replacing the international feeds with the Idea Wall, usage began to shift. Students wrote reflections and supported or challenged each other (figures 1 and 2). Many artists drew their favorite cartoon characters or depictions of our Maverick bull mascot, while others crafted classical figure drawings (figure 3). With the recent addition of strategically placed couches, we now see many students huddled around sections of the wall writing out scientific or mathematical equations during exam time (figures 4, 5, and 6).

You can influence student use of these new interactive spaces through your social media feeds like we did. Show creative or academic whiteboard use on Instagram stories or tweet photos of engaging or witty poll answers. Create hashtags so your students can interact with you across all platforms. The University of Central Arkansas shares their whiteboard art using #UCALibraryArt.⁴ Our @unolibraries Instagram hashtag, #CrissWRITEboards, includes our library's name and a play on words to tell students it is okay to write on the whiteboards (figure 7).

Our original intention for the Idea Wall was to let students erase content when they needed room for their own work, but we quickly found out that students would not erase another students' content. Our best practice now is to erase the entire wall once per week. Along with allowing space for new content, this ensures that nothing will dry onto the wall. To protect the whiteboard paint, we do not use any solvents on the wall. Through trial and error, we have found that blue and black markers are easiest to erase with little or no ghosting. If a mark doesn't come off the whiteboard wall because a whiteboard marker dried on the wall or because someone used permanent marker, we scribble over it with an easily erased color of whiteboard marker and immediately wipe it off. The dried or permanent marker will come off with the fresh marks.

We knew the large whiteboard wall would work because our experiments with a previous small whiteboard engagement exercise was successful. Likewise, our interactive spaces are successful when students create their own moments of creativity and play. Aside from one Instagram post asking people to play nice, we post no rules about whiteboard content. In large part, our students have been respectful and kind in all our interactive spaces. Our last heated discussion came about from a loaded small whiteboard question: "Should some books be banned?" (figure 8). We welcome this type of engagement until students begin



Figure 1. A note on the whiteboard wall: "It's called a trash can, not a trash cannot!!!"



Figure 3. Human figure drawings on the whiteboard wall.



Figure 5. Study notes on the whiteboard wall: "Science is art."

engaging in ad hominem attacks or include graphic profanity, which rarely happens. This is our students' space to get goofy, flirty, serious, and scholastic. We hope that whether

Figure 2. A note on the whiteboard wall: "Your art is lovely."



Figure 4. Class notes on the whiteboard wall.

they use the Idea Wall and other whiteboards around the library for doodles or data, they are thinking and studying better than before.

HIGH-TECH: A DIGITAL WALL, GRAFFITI, AND ARCHIVAL MATERIAL

Our Creative Production Lab is on the main floor of the library and is the library's creative technology heart. It contains our 3D printers, laser cutter, vinyl cutter, VR setup, audio and video recording studios, along with a full creative computing lab. For many years, one underused piece of technology in the Creative Production Lab was the Christie interactive touch screen ("the video wall"). This large computer screen welcomed visitors to the Creative Production Lab with Fruit Ninja, a graffiti wall, or other online games. Occasionally students would create interactive presentations

AMPLIFY YOUR IMPACT





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Figure 8. Whiteboard discussion: "Should some books be banned?"

for class projects, but not often. While these games and presentations were interesting to the people who walked into the Creative Production Lab, they had a high cost per lower-order interaction. Additionally, the large footprint of the video wall and its housing meant it was taking up valuable space in the rapidly-expanding Creative Production Lab. Because of this, we decided to move the video wall to where it would get noticed: just inside the main entrance and across



Figure 7. #CrissWRITEboards @unolibraries social media post.

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|------------------------------------|------------------------------------|-----------------------|---------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1 Project Achieve | 2 Human Library | 3 Human Library | 4 Human Library | 5 Project Achieve | 6 Human Library |
| 7 Human Library | 8 Human Library | 9 Human Library | 10 Project Achieve | 11 Project Achieve | 12 Project Achieve | 13 |
| 14 | 15 | 16 | 17 Project Achieve | 18 Project Achieve | 19 Project Achieve | 20 Project Achieve |
| 21 | 22 10a-2p Wildflower WFAB | 23 Project Achieve | 24 10a-2p Wildflower WFAB | 25 10a-2p Wildflower WFAB | 26 10a-2p Wildflower WFAB | 27 10a-2p Wildflower WFAB |
| 28 10a-2p Wildflower WFAB | 29 Project Achieve | 30 | | | | |

Figure 9. Video wall calendar.

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Figure 10. Interactive Human Library display on the video wall.



Figure 12. Student interacting with the UNO Libraries Archives and Special Collections Marlin Briscoe display by moving a 3Dscanned figurine from the collection. See the Marlin Briscoe online exhibit at unomaha.omeka.net/exhibits/show/briscoe/main.



Figure 14. Former UNO Libraries Digital Initiatives Librarian Yumi Ohira with TRiO Project Achieve staff standing in front of the Project Achieve Historical Highlights digital exhibit. From left: Director Shannon Teamer, Yumi Ohira, English Specialist Connie Sorensen-Birk, Office Associate Lauren Wyler, Counselor Pat-Killeen-Brown.



Figure 11. Interactive KANEKO Light exhibition marketing.



Figure 13. UNO Libraries Metadata Coordinator Angela Kroeger with Sam Fried's descendants looking through select items from the Sam Fried Digital Archives. See the Sam Fried Digital Archives online at unomaha.contentdm.oclc.org/digital/collec tion/p16383coll15.

from our main service desk, on the way to the coffee shop.

After the move, technicians recalibrated the screens and the video wall became part of our students' daily lives. In the mornings, turning on the video wall is part of our opening checklist. When there are event promotions, new collections, tour groups, or special events, we want the video wall to relate to those events or visitors. To share the load of organizing and reserving the video wall, our patron services department placed a calendar and page of streaming video links on our internal wiki (figure 9).

The content on the video wall changes throughout the semester. It is alternately educational, amusing, and sublime. Much of the time, it is in some way interactive. At the beginning of the semester, we use the graffiti wall to welcome our students back and introduce them to the concept of the interactive technology. We then take it month by month, with bespoke interactive presentations for theme months. Using Intuiface, a software solution with a PowerPoint-like interface, we create our own displays with layers of information.

AMPLIFY YOUR IMPACT

So far, we have created presentations for our Human Library (figure 10), Banned Books Week, Open Access Week, federal and local elections, and exhibitions at our partner gallery space KANEKO (figure 11). Archives and Special Collections created interactive displays featuring University of Nebraska Omaha alumni US Senator Chuck Hagel, Pro Football Hall of Famer Marlin Briscoe (figure 12), Holocaust survivor, entrepreneur, and philanthropist Sam Fried (figure 13), and the university's TRiO Student Support Services (Project Achieve) program (figure 14). We also show livestreams that encourage students to pause or sit down to watch for a while. For instance, during 2017's total solar eclipse we livestreamed NASA videos, and for finals weeks we typically stream puppies and kitties so our stressed students can decompress.

Get interactive with your displays, but don't buy technology just for the sake of technology. Ask yourself how you'll use it to inspire, educate, or delight your visitors and determine how you'll track that goal. If you have underutilized technology, take it out of its hiding place and into the library's main space for special events or for permanent installation. If you don't have the budget for a large Christie display, consider purchasing a smaller touchscreen television and mounting it to a wall. If you have a clean, smooth wall or a large whiteboard already installed in your space, look into something like an Epson BrightLink Interactive Display. Or, pair a regular television display showing an informational PowerPoint with an interactive whiteboard question nearby.

MOVING FORWARD

Since their installation, the interactive spaces described in this article have become part of the personality of the library, and we work hard to ensure they don't become stale or predictable. We continue to brainstorm new ways to use these spaces to surprise and delight our students. Ideas under development include pop-up virtual and augmented reality events staged around the café traffic pattern during our university's fall welcome week, a large special event display outside the café for fall semester, and partnerships with our campus game design club and community stakeholders to develop games for the video wall using 3D gaming engine Unity.

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Beyond Face Value Evaluating Research Consultations from the Student Perspective

In this study, the authors examined the value of research consultations, an important component of reference services. Previous research explored the sustainability and scalability of a large-scale research consultation project from the librarian perspective. Through survey responses from the perspectives of more than 1,500 students, the authors gathered evidence on the impact of research consultations on student confidence and their perceptions of the approachability and helpfulness of library personnel.

ibrarians understand that the disciplinary information environment is difficult for the novlice user to navigate, and as such may be particularly anxiety-inducing for those new to academic research. To address these concerns and build student confidence and knowledge of the available research resources and services, Penn State's Schreyer Business Library personnel and a Smeal College of Business faculty member established a multi-year collaboration to familiarize entry-to-discipline students with foundational business concepts and core business research skills.

Management 301 (MGMT 301), Basic Management Concepts, is a required course for acceptance into the Smeal College of Business. Enrollment

is primarily comprised of first- and second-year students. The faculty member, Professor Ronald Johnson, strongly considers MGMT 301 the course in which students begin to learn the "language of business," and establish foundational business acumen and literacy. In MGMT 301, students are required to complete a research assignment and to meet with business library personnel for a research consultation. Known to students as "research consultants," full-time business librarians and staff, and part-time student peer educators contribute to the staffing model. At this meeting, MGMT 301 students have the opportunity to ask research consultants questions on completing company and industry research. The research consultation also provides an opportunity for the student to develop a positive perception of library personnel as helpful and approachable, and establish a connection and rapport that encourages future interactions.

The consultations take place in a one-on-one or small-group setting, a unique learning environment for students in a high-enrollment course. In the fall semester, the class enrollment is approximately 300 students, composed of mostly of second-year students. In the spring semester, the class enrollment size is approximately 1,600

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students, composed of mostly of first-year students. As a result of this collaboration, the majority of students enrolled in the Smeal College of Business have directly engaged with business library personnel, resources, and services through research consultations.

Reiter and Huffman published a paper evaluating participation data and examining the logistics of offering research consultations for this high-enrollment course.¹ While the article showed that the large-scale reference project was scalable and sustainable from the library perspective, questions remained on if the research consultation model was meeting the intended aims of helping students feel comfortable and confident using library resources and working with library personnel. Through survey research, we aim to evaluate the project from the student perspective, building on the previous research addressing the library's perspective on the research consultation model.

LITERATURE REVIEW

Library anxiety has been widely observed and extensively studied in library science since Constance Mellon identified and named the phenomenon.² Since, librarians have attempted myriad approaches in reference and instruction to mitigate the effects of anxiety. Additionally, through open houses, improved signage, and more welcoming services, librarians have sought ways to help students feel more comfortable and confident navigating the library. Although underexplored in the literature, research consultations are another approach to helping students gain confidence in conducting research and relieving library anxiety, as noted by participants in a study by Magi and Mardeusz.³

Exposure to library resources and services through research consultations demonstrates to students that librarians are approachable and helpful, while also correcting any misperceptions that may increase anxiety. Studies have examined perceptions of librarians from a variety of angles: What positive or negative perceptions do students have about librarians? What perceptions have they formed from outside influences? What misconceptions do students have about librarians and their roles?

Occupational stereotypes may form the foundation of negative impressions, and student perceptions of librarians have been examined through this lens. Although not directly focused on academic librarianship, Seale determined that mass media depictions of librarians generally fall into five distinct categories, and that these stereotypical representations may have an effect on the public's perceptions of librarians.⁴ Using Seale's and additional categorizations, Attebury analyzed 100 YouTube videos created by both librarians and non-librarians for stereotypical representations.⁵ Not surprisingly, librarians overwhelmingly tended to portray themselves as hero/ines or as fun/positive compared to depictions in non-librarian produced videos. Jennings provided a review of the literature on librarian stereotypes and concluded that *any* profession will have persons fitting that profession's stereotypes.⁶ While research has shown that librarian stereotypes persist and awareness may be helpful, Jennings stressed the importance of moving beyond the preoccupation with combating stereotypes and focusing on the public-facing services provided.

Stereotypes, among other factors, can inform whether or not a student regards a librarian as approachable. To evaluate perceptions of librarian approachability, Bonnet and McAlexander used the visual cues of age, gender, and race in an image-rating survey.7 In a later study, Bonnet and McAlexander performed a similar image-rating survey, but used the visual cues of affect and attire to assess librarian approachability.8 Langridge, Riggi, and Schultz assessed students' perceptions of librarians, including approachability, also using an image-rating component and questions about media portrayals of librarians.9 The three studies similarly found that demographic characteristics and appearance affected the perceived approachability of the librarian. Because negative perceptions of librarian approachability may prevent students from using the library, librarians have devised strategies for addressing this problem. For example, Muszkiewicz determined that the creation of a "Get to Know Your Librarian" orientation program for incoming students held at Valparaiso University's Christopher Center Library lessened student anxiety and increased feelings of approachability towards librarians.¹⁰

Other studies have examined the perceived helpfulness of librarians. Fagan conducted a survey to examine students' perceptions of academic librarians and provided thoughts on what librarians may do to address misconceptions including librarians' willingness to help students.¹¹ Encouragingly, 88 percent of the survey respondents disagreed with the statement that librarians were too busy to help students, but were less positive when rating "librarians' willingness to change their services to meet their patrons' needs."12 Vinyard, Mullally, and Colvin explored how students search for information, as well as what prompted students to seek help from a librarian.¹³ Through one-on-one interviews, the authors determined that students preferred searching for information independently, and would seek assistance only when frustrated by the amount of time it took to perform research. Once connected with a librarian for assistance, all of the study participants stated that they found the librarians to be helpful and would ask for research assistance in the future. Brenza, Kowalsky, and Brush surveyed student reference assistants about their perceptions of the library.¹⁴ Although none of the survey questions specifically focused on how the reference assistants perceived librarians, one student, when asked, "What is the most important thing students need to know about the library?" offered commentary about the librarians: "They [the librarians] can help you find anything you need and will do it so happily."15 These findings suggest that when students can connect with librarians earlier in the research process, they avoid frustration and have improved perceptions of librarians' helpfulness. Research

consultations present an opportunity to reinforce perceptions of librarians as helpful and approachable.

Library literature includes numerous studies exploring research consultations from both the librarian and student perspective. Butler and Byrd investigated research consultations from both the librarian and student perspectives and identified where perceived values aligned.¹⁶ For example, the authors found that in 46 out of 80 (58 percent) research consultations they reviewed the librarian and student agreed that the session was "very useful."17 Notably, there were also 23 cases in which the librarian underestimated how useful the student found the consultation, which Butler and Byrd pointed to as evidence of "provider pessimism" or the phenomenon of the librarian not feeling like they met the student's need.18 In such cases, even though the student may have found the research consultation useful, the librarian may be left wondering if the session was worth their or the student's time.

Providing in-depth attention to an individual student or student team involves the time commitment of the appointment, as well as any time spent by the librarian preparing for the meeting. Several studies evaluated time spent by librarians on research consultations.¹⁹ Other research discussed the need to evaluate research consultations to ensure that the time spent matches the benefit to the populations served.²⁰ Discussions and findings tended to show that while research consultations do require a time investment, the time is well spent. Yi suggested research consultations were valuable as a supplement to library instruction in the classroom.²¹ Librarians spent 32 percent of their teaching time on research consultations. Notably, in this example, research consultations were assessed as part of library instruction rather than reference or another area of service.

In addition to supplementing information literacy instruction, the literature identifies other types of value provided by research consultations, including the relationship-building potential of the interaction. For example, Savage discussed research consultations as a unique opportunity for student engagement analogous to a professor's office hours.²² Similarly, but from the student perspective, Watts and Mahfood reported that students in their study saw librarians as equivalent to their professors after their research consultations, appreciated the individualized attention, and acknowledged the librarian's expertise.²³ Studies by Magi and Mardeusz, and Rogers and Carrier also singled out librarian's focused attention and their subject knowledge as important benefits of research consultations from the student perspective.²⁴ Magi and Mardeusz specifically discussed how students valued focused time with the librarian and that they had the opportunity to ask questions of someone with experience and expertise. Rogers and Carrier labeled undivided attention and the subject expertise of the librarian as two of four main aspects of a research consultation valued by students.²⁵ The other two benefits the authors identified were the high level of interaction and engagement, and the chance to meet in an environment that facilitated the other three valued

aspects of a research consultation service. Studies examining research consultations have found students value the content and attention received, all of which inform and aid in enhancing positive perceptions of librarians.

While studies have identified valued features of research consultations that may balance out the time spent, other aspects of research consultations, such as when students are introduced to the service during their college careers, have received limited attention in the literature. Faix, MacDonald, and Taxakis compared the effectiveness of research consultations for freshmen and senior undergraduate students, finding that upper-division students benefit more than lower-division students.²⁶ According to their study, freshmen quickly became overwhelmed by too many sources. The authors noted more research is needed on how to design research consultations for freshmen students.

Although significant research has been conducted on the value of research consultations from the student perspective, the number of students surveyed has been relatively small, ranging from 16 to 95 participants, according to a scoping review of research consultation assessment methods by Fournier and Sikora.²⁷ Research implies that the helpfulness and approachability of librarians are valued in research consultations; however, these aspects have not been the focus of extensive study. Furthermore, there is a lack of exploration into the impact of consultations on the confidence and comfort of students conducting research. In this study, we surveyed more than 1,500 students, focusing on student research confidence and their views of library personnel as helpful and approachable. Specifically, we investigated the following research questions:

- Did overall research confidence increase after having a research consultation?
- Are there differences in the research confidence level ratings of first- and second-year students?
- Did students perceive library personnel as helpful? Approachable?

We focused on confidence rating as an indicator of how students *felt* about their ability prior to and after research consultations. This study was not intended to evaluate research competence nor was the confidence rating used as an indicator of their research ability.

METHODOLOGY

We developed a survey instrument that the Institutional Review Board determined to be exempt from review. The survey was built using the Qualtrics software suite and featured a branching survey design to separate MGMT 301 students that had met with a research consultant from those that did not. The survey consisted of both quantitative and qualitative questions. Our study covers the quantitative analysis of the data collected. Because librarians, staff, and

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student peer educators were known to MGMT 301 students as "research consultants," we chose to use this term in the survey instead of business library personnel.

For MGMT 301 students who met with a research consultant, four quantitative questions gauged the level of confidence about conducting research for their assignment *prior* to meeting with a research consultant, and the level of confidence *after* meeting with a research consultant, as well as the level of approachability and helpfulness of the research consultant. Students that did not have a consultation were directed to a qualitative question that asked about their choice for not meeting with a research consultant. Demographic information was also collected (see appendix A). Of the demographic information, only class standing was cross-tabulated with the quantitative survey questions as it was most relevant to our research questions.

MGMT 301 is offered in Fall and Spring semester of each academic year. To ensure all students had the opportunity to meet with a research consultant, we deployed the surveys near the end of the semester during Fall 2016 and Spring 2017. The faculty member promoted the survey to MGMT 301 students during class time and via email. Those who completed the anonymous survey received extra credit points towards their final grade in the course. The identifying information needed to record extra credit points was collected through a separate survey instrument.

In Fall 2016, the total population surveyed was 257. Of the 257 students surveyed, 251 responded. However, not all 251 respondents fully completed the survey. We removed 17 incomplete surveys in order to have consistent data for analysis. We received 234 complete responses, resulting in a response rate of 91 percent. In Spring 2017, the total population surveyed was 1,559 and 1,402 responded to the survey. Of the 1,402 responses, we removed 8 incomplete responses for data consistency. We received 1394 completed surveys, resulting in a response rate of 89 percent. For the Fall 2016 and Spring 2017 academic year, 1,628 of the 1,816 surveys taken were complete and used in the analysis.

DATA AND ANALYSIS

Population Breakdown

Of the 234 surveys analyzed from Fall 2016, 226 (97 percent) students met with a research consultant. In Spring 2017, 1,359 (97 percent) out of 1,394 students met with a research consultant. In total, 1,585 students opted to have a research consultation. Of the 43 remaining students that indicated they did not meet with a research consultant, 39 provided answers to the qualitative question asking them about their choice for not meeting with the consultant. Overwhelmingly, students noted time constraints and scheduling conflicts as their reason for not meeting with the consultant. Several students admitted to procrastinating and missing the opportunity for a meeting. **Table 1.** Students Who Met With a Research Consultant by ClassStanding in Fall 2016 and Spring 2017

| Class Standing | Number of Students | |
|----------------|--------------------|--|
| First-year | 1,273 (80%) | |
| Second-year | 296 (19%) | |
| Other | 16 (1%) | |
| Total | 1,585 | |
| | | |

| Table 2. Confidence Rating: Before and After Research |
|---|
| Consultations in Fall 2016 and Spring 2017 |

| Confidence Rating | Before Research Consultation | After Research Consultation |
|--------------------|---------------------------------|--------------------------------|
| Confident | 484 (30%) | 1,340 (84%) |
| Somewhat Confident | 869 (55%) | 235 (15%) |
| Not Confident | 232 (15%) | 10 (1%) |
| Total Students | 1,585 | 1,585 |

Focusing on the students that did meet with a research consultant, in Fall 2016, 15 (6 percent) were first-year students, 203 (90 percent) were second-year students, and 8 (4 percent) identified themselves as a different class standing. All of the students that identified themselves as an "other" class standing stated that they were in their third year at Penn State.

In Spring 2017, of the students that met with a research consultant, 1,258 (92.4 percent) were first-year students, 93 (6.8 percent) were second-year students, and 8 (0.6%) identified themselves as a different class standing. Of the students that identified themselves as an "other" class standing, 5 were in their third year at Penn State, 2 in their fourth, and 1 in their fifth (see table 1).

Research Confidence: Before and After Consultations

To determine the effectiveness of these consultations, we asked students to reflect on their level of confidence performing library research before their consultation. Of the total that met with a research consultant in Fall 2016, 62 (27.4%) reported feeling *confident* about their ability to perform library research prior to meeting with a research consultant, while 109 (48.2%) felt *somewhat confident* and 55 (24.3%) felt *not confident*. In Spring 2017, 422 (31.1%) of students reported feeling *confident* about their ability to perform library research before their consultation, while 760 (55.9%) felt *somewhat confident* and 177 (13%) felt *not confident*.

We also asked students to consider their level of confidence performing library research after their consultation. Of the total that met with a research consultant in Fall 2016, 192 (85%) reported feeling *confident* about their ability to perform library research after meeting with a research consultant, while 32 (14%) felt *somewhat confident* and 2 (1%) felt



Figure 1. Confidence rating before research consultation, by class standing



Figure 2. Confidence rating after research consultation, by class standing

not confident. Of the total that met with a research consultant in Spring 2017, 1,148 (84.5%) reported feeling *confident* about their ability to perform library research following their research consultation, while 203 (14.9%) felt *somewhat confident* and 8 (0.6%) felt *not confident* (see table 2).

To explore whether or not there were differences in the research confidence ratings of first- and second-year students, we compared these results by class standing. Of the total first-year students (n = 1,273) that met with a research consultant, 391 (31%) reported feeling *confident* about their ability to conduct research before the meeting, 716 (5%) reported feeling *somewhat confident*, and 16 (13%) reported feeling *not confident*. Similarly, of the total second-year students (n = 296), 86 (29%) reported feeling *confident* before the research consultations, 18 (50%) reported feeling *somewhat confident*, and 62 (21%) reported feeling *not confident* (see figure 1).

Beyond Face Value

After meeting with a research consultant, both first- and second- year students reported similar levels of confidence. Of the total first-year students (n = 1,273), 1,073 (84%) reported feeling *confident* about their ability to conduct research after the meeting, 192 (15%) reported feeling *somewhat confident*, and 8 (<1%) reported feeling *not confident*. Similarly, of the total second-year students (n = 296), 254 (86%) second-year students reported feeling *confident*, 40 (14%) reported feeling *somewhat confident*, and 2 (<1%) reported feeling *not confident* after their research consultation (see figure 2).

Approachability

Of the total that met with a research consultant in Fall 2016, 211 (93.4%) considered the research consultants to be *approachable*, while 14 (6.2%) considered them to be *somewhat approachable* and 1 (0.4%) considered them be *not approachable*. In Spring 2017, 1216 (89.5%) of the total students that met with a research consultant considered them to be *approachable*, while 137 (10.1%) considered them to be *somewhat approachable* and 6 (0.4%) considered them be *not approachable* (see table 3).

First- and second-year students rated the approachability of research consultants similarly. Of the total first-year students in the analysis, 1,136 (89%) found research consultants approachable, 130 (10%) rated them to be somewhat approachable, and 7 (1%) found them to be not approachable. Of the second-year

students, 275 (93%) considered research consultants to be *approachable*, 21 (7%) found them *somewhat approachable*, and 0 (0%) rated them as *not approachable*.

Helpfulness

Of the total that met with a research consultant in Fall 2016, 203 (89.8%) considered the research consultants to be *help-ful*, while 22 (9.7%) considered them to be *somewhat helpful* and 1 (0.4%) considered them to be *not helpful*. In Spring 2017, 1,065 (78.4%) of the total that met with a research consultant in Spring 2017 considered them to be *helpful*, while 264 (19.4%) considered them to be *somewhat helpful* and 30 (2.2%) considered them be *not helpful* (see table 4).

There was a slight difference in the helpfulness ratings by first- and second-year students. Of the first-year students in the analysis, 999 (79%) found research consultants *helpful*,

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| Table 3. Approachability | | | | |
|--------------------------|--------------------|--|--|--|
| Rating | Number of Students | | | |
| Approachable | 1,427 (90%) | | | |
| Somewhat approachable | 151 (10%) | | | |
| Not approachable | 7 (<1%) | | | |
| Total | 1.585 | | | |

247 (19%) rated them to be *somewhat helpful*, and 27 (2%) found them to be *not helpful*. Of the second-year students, 256 (87%) considered research consultants to be *helpful*, 36 (12%) found them *somewhat helpful*, and 4 (1%) rated them as *not helpful*.

DISCUSSION

By providing students with one-on-one or small group research consultations during a lower-division course, we hypothesized that business library personnel were situating students to feel more confident conducting business research. Survey results show that research confidence ratings increased dramatically after meeting with a research consultant, suggesting this type of intervention is effective from the student perspective. Although high-volume research consultations are time-intensive for library personnel, we find it encouraging that students show an increase in research confidence as a result of the interaction. Previous literature highlighted the relationship-building potential, focused attention, and librarian expertise as valuable aspects of research consultations.²⁸ Our findings reveal an additional benefit of research consultations not discussed indepth in previous literature: increased research confidence of students. Given ongoing concern with decreasing library anxiety and increasing student comfort with library use, the results provide further evidence of the value of research consultations to students and the importance of committing personnel time to the endeavor.

While we expected research confidence to increase overall, we expected to find notable differences in research confidence ratings between first- and second-year students. Typically, second-year students have had the opportunity to acclimate to the academic environment and may have conducted library research in other courses. Surprisingly, in this study, the confidence rating percentages of first- and second-year students are very similar. Although this finding warrants further research, we speculate that a possible explanation is that the difference between a first-year student and a second-year student may only be a single semester, depending on matriculation date. Another possible explanation is that first-year students may feel more confident than their ability warrants given their lack of experience with research in the higher education environment. This explanation is consistent with Kruger and Dunning's findings

| Table 4. Helpfulness | | | | |
|----------------------|--------------------|--|--|--|
| Rating | Number of Students | | | |
| Helpful | 1,268 (80%) | | | |
| Somewhat helpful | 286 (18%) | | | |
| Not helpful | 31 (2%) | | | |
| Total | 1,585 | | | |

that unskilled people overestimate their intellectual abilities.²⁹ Our study evaluated research confidence and did not assess research competence; however, the overconfidence of first-year students in their information literacy skills is also a recurrent finding in studies on the topic.³⁰ Additionally, MGMT 301 is generally the first business course taken by both first- and second-year students and therefore they may have similarly limited experience with research in the disciplinary context. Knowing that research confidence does not necessarily increase with years of experience in the academic environment, library personnel can leverage the learning context afforded by research consultations to evaluate the individual needs of students new to a discipline.

We anticipated students to rate library personnel as approachable and helpful based on anecdotal student feedback from previous semesters, and overall, results supported this expectation. The most notable finding was the difference between the helpfulness ratings by first- and second-year students. More second-year students rated research consultants as helpful than first-year students. Related to our findings on research confidence, we conjecture that second-year students may be more aware of what they do not know and thus have a greater appreciation for research consultation assistance. Our findings on approachability and helpfulness offer further evidence that consultations provide the foundation of positive relationships between business students and library personnel. Research consultations succeed in effectively connecting students new to disciplinary research to the resources and people they can return to for help.

While beyond the scope of this study, analysis of the qualitative data gathered from the students that chose to meet with a research consultant would yield additional insights on research consultations from the student perspective. Specifically, these qualitative data could be analyzed for possible insights into what factors affect student ratings of confidence, helpfulness, and approachability. Additional avenues for exploration could include the impact of prior library instruction on research confidence, and general education and disciplinary learning goals as they relate to research consultations. Ideally, these studies could be longitudinal in order to assess the lasting impact of research consultations and early career library interventions on the individual over time. Familiarizing students with the resources of their discipline in an entry-to-major course may have the potential to increase student learning gains in upper-level courses where more intensive research may be required.

CONCLUSION

Research consultations are one way to create a learning experience in which students gain research confidence and acclimation to their institution's library resources and personnel. Introducing students to the library personnel assigned to their discipline through course-related research consultations may ease overall library anxiety and subtly correct any misconceptions students have about the roles of academic library personnel.

The Reiter and Huffman article supplied evidence that library personnel are able to successfully build and maintain a sustainable model to support the management of research consultations for a high-enrollment course.³¹ Gathering data from the student perspective provides insight into the impact of the service. Because of the size of the population surveyed, we are able to draw conclusions about the effectiveness of research consultations on confidence, and perceptions of library personnel approachability and helpfulness. The study suggests that one-on-one and small-group consultations support a dramatic shift in research confidence while also reinforcing library personnel as approachable and helpful. From both the student and library perspective, this courserelated service is well worth the time investment.

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APPENDIX A. SURVEY QUESTIONS

- 1. Did you meet with a research consultant for the Business Information Project?
 - Yes
 - No (If No, skip to question 8)
- 2. How would you rate your level of confidence about doing library research for your assignment *before* meeting with the research consultants?
 - Confident
 - Somewhat confident
 - Not confident
- 3. How would you rate your level of confidence about doing library research for future assignments *after* meeting with the research consultants?
- Confident
- Somewhat confident
- Not confident
- 4. How would you rate the approachability of the research consultant?
- Approachable
- Somewhat approachable
- Not approachable
- 5. How would you rate the helpfulness of the research consultant?
- Helpful
- Somewhat helpful
- Not helpful
- 6. Would you meet with a research consultant again for assistance with future assignments? Why or why not?
- 7. Do you have any final comments or do you have any suggestions for how we may improve the research consultation service in the future? (Skip to question 9)

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- 8. What was the reason you chose not to meet with a research consultant?
- 9. Please indicate your class standing
- First-year
- Second-year
- Other (Please specify)
- 10. Please indicate your current or intended major
 - Accounting
 - Corporate Innovation and Entrepreneurship
 - Finance
 - Management
 - Management Information Systems
 - Marketing
 - Risk Management
 - Supply Chain and Information Systems
 - Undecided Business Major
 - Major outside of Smeal College of Business
- 11. What is your gender?
 - Male
 - Female
 - Other
- 12. What is your race?
 - White/Caucasian
 - African American
 - Hispanic
 - Asian
 - Native American
 - Pacific Islander
 - Other
- 13. Are you an international student?
 - Yes
 - No

Changing the Venues but Not Changing Our Tune

Service Model Transition at a Music and Performing Arts Library

The goal of this quantitative study is to explore the effect of consolidating circulation and reference functions at a single service point in a specialized setting, namely, a large academic music and performing arts library. It analyzes reference transactions before and after the merging of reference and circulation service points. Transaction trends are evaluated based on location within the library, type of question, and question complexity. The authors find that there are significant impacts on reference staff time due to consolidating desks, but the closer proximity led to an increase in activity and allows for referrals that are more successful.

eference and circulation service models at academic libraries have evolved over time for various reasons—whether in attempts to meet changing patron needs and expectations, or in response to budget or staffing pressures. A frequent impetus for consolidating or closing service points is diminishing traffic, a trend that has been happening in academic libraries for over a decade.1 In best-case scenarios libraries have enough time to thoughtfully plan such a transition and assess the effects of the changes afterwards. This paper looks at changes in patron transaction trends at a large academic music and performing

arts branch library before and after it merged two of its three first-floor service points. We hoped this reconfiguration would improve the level of service offered through more effective staffing and referrals. Data analyzed includes transaction frequency and type across the different service points. The goal of the study is not to argue whether or not an academic music library should have a stand-alone reference desk, but to explore the effect of consolidating circulation and reference functions at a single service point in such a specialized setting.

BACKGROUND

The University Library at the University of Illinois at Urbana-Champaign is the largest public academic library in the country and was at one time composed of close to four dozen separate libraries.² In 2008 the University Library began a coordinated series of projects known as New Service Models, which over the course of several years involved merging and closing some branches, less from a budget standpoint (although that was a factor) and more from making sure services were as efficient as possible.³ It was unofficially as part of this process that

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Figure 1. First floor service points prior to the consolidation



Figure 2. First floor service points after the consolidation

the Music Library (which already held music and dance materials) became the Music and Performing Arts Library (MPAL) by incorporating a portion of the theatre materials from what was then called the English Library. As of 2017, MPAL, which is housed in the Music Building, is now one of only seven subject libraries that exist outside of the Main Library building. MPAL serves the School of Music, the Department of Dance, the Department of Theatre, as well as faculty and students from elsewhere on campus, community patrons, and scholars from all over the world.

MPAL has almost 500,000 items in its physical collections, which include circulating materials and non-circulating Special Collections.⁴ All media materials are, for the most part, classed in Library of Congress Classification and are housed in two different closed stacks areas (but generally circulate). Circulating books and music scores are classed in either LCC or Dewey Decimal Classification, while non-circulating reference materials (books and scores) are classed in LCC; all of these materials are in open stacks. Although play scripts and journals are classified, they are shelved in open stacks by author/title for plays and by title for journals in their dedicated shelving locations. This duality in classification schemes and assortment of shelving arrangements leads to challenges for patrons and staff.

SERVICE DESK HISTORY AND STAFFING

The service desk configuration has changed only a few times over the Music and Performing Arts Library's 44-year history in its current space.5 When it originally opened in 1974, it had a twostation circulation desk near the entrance and a reference desk on the first floor. as well as a service desk at the top of stairs on the second floor. In the mid-1990s. the reference desk was relocated and incorporated into a new public computing area closer to the circulation desk, which was re-situated, but still close to the library entrance (see figure 1). While in close proximity to the desks, librarian and other staff offices are separated from the public computer area by a wall, making it difficult to see and hear what was happening at the reference desk. In 2003, the second-floor service desk, which primarily provided circulation functions and access to closed stacks media and special collections, was closed due to

budget constraints. It was reopened in late January 2014.

Prior to the desk consolidation, paraprofessional staff and undergraduate student workers operated the two stations at the first-floor circulation desk during all of the library's open hours. Librarians, select paraprofessional staff, and pre-professional graduate assistants from the graduate school of information sciences worked the reference desk, which was staffed 9 a.m. to 5 p.m. during the week, as well as during some evening hours until these hours were eliminated in 2008. Since its reopening in 2014, the second-floor service point, which is only open in the afternoons Monday through Friday, has been operated by a paraprofessional staff member. With four separate desks and different staffing profiles, staff observed that patrons were often required to repeat their questions multiple times to get the help or items they needed.

IMPETUS FOR CHANGE AND PLANNING PROCESS

Starting after the fiscal crash of 2008, the University of Illinois faced ever-increasing budget pressures with late payments from the state of Illinois in some years and then when the state failed entirely to pass a budget for FY16 or FY17 (but it finally did for FY18). Therefore in 2015 the university, including the University Library, started planning ahead for expected loss of state income and likely permanently reduced budgets. The entire library was tasked with finding ways to save money. Many cost savings were realized in central administrative budgets and IT, but branch libraries had harder choices to make. MPAL's budget is primarily divided between collections and personnel. Collections money is protected from budget cuts and the only part of the personnel budget that can be manipulated easily if there are no anticipated retirements or vacancies in a unit are funds to hire student hourly workers.

In the face of having to reduce its student wage budget, in Fall 2015 librarians in the Music and Performing Arts Library reviewed reference statistics over the preceding several years and noted an overall decrease in interactions with patrons. MPAL lost two music librarian positions and a senior paraprofessional staff position due to budget and other issues between 2007 and 2016, which decreased the amount of time the reference desk is staffed with librarians and paraprofessional personnel. We looked at service models at other libraries in the University Library system and at other music libraries and reviewed the literature on staffing and desk models. We also looked at MPAL's historic student wage expenditures, which (somewhat surprisingly) had been routinely underspent in recent years. As a result, MPAL proposed that it would agree to a permanent 30% student wage decrease if Library Administration would make a one-time investment in rebuilding the first-floor circulation desk to house a circulation and reference station. The redesigned desk would better accommodate current day service activities and allow a reduction from three staffed stations on the first floor to two. Administration agreed and we began the process of redesigning the desk.

MPAL librarians consulted with Library Facilities and Library IT who determined that we had to work within the constraints of the existing footprint since we did not have funds to remodel the entire shelving and staff area behind the desk. However, we made subtle changes to the layout of the desk to better accommodate reference work, incorporated shelving for ready-reference materials behind the desk, and angled the circulation station slightly to be more welcoming to people entering the library. The readyreference collection was pared down significantly, and only the most-used items were moved to the new location with the remainder incorporated into the regular reference collection (see figure 2). The reconfigured service desk opened on January 12, 2016.

STAFFING IMPLICATIONS, CONFIGURATION, AND TRAINING

MPAL reference staff have observed that student workers, and at times other staff, do not refer questions to reference staff when appropriate and often try to take a question too far. We hoped that by combining service points, reference staff would be physically situated to more seamlessly insert themselves into reference transactions without causing too much disruption to patrons or forcing them to repeat their questions multiple times. After the desk merger, the primary circulation station continues to be operated by staff and students, and the reference station continues to be staffed by librarians, select paraprofessional staff, and graduate assistants, who perform circulation functions when circulation staff are otherwise occupied with patrons.

Beginning in Fall 2017, MPAL added graduate assistants on the reference desk from 7 to 9 p.m. two nights a week and one two-hour weekend shift so that there would be some additional reference assistance available during more of our open hours. The other two evenings of the week are covered by the paraprofessional members who also serve on the reference team. While this changed the evening and weekend staffing profile, it did not increase the number of staff available, only the availability of staff with reference training. Other evening and weekend hours that the library is open, student workers or paraprofessional employees staff the reference station but don't provide in-depth reference service. With reference staff now serving as backup for circulation, new and increased training was required. A single online guide for the service desk was designed for quick reference to information that would support both circulation and reference functions and incoming MPAL graduate assistants now receive training on circulation functions on an annual basis.

In January of 2016, around the same time the MPAL service desk was reconfigured, the School of Music completed a building renovation that included the installation of an information desk not far from the library's entrance. School of Music personnel staff this desk and assist visitors to the building with directions and answer other questions from students and faculty. With the introduction of this new service point, we anticipated a decline in directional and other factual questions about the building and the School of Music. It is possible, however, that other questions asked at the information desk were now being referred to the library, increasing the number of transactions.

As part of our effort to assess the impacts the desk merger and other environmental factors such as the new School of Music information desk had on MPAL's reference statistics, we examined reference transaction data for the three-year time period before the merger and the two years post-merger. These time periods were selected to give ample data for comparison pre- and post-consolidation. Data points for interaction locations, types of questions, number of questions, and question difficulty level were analyzed to show whether there were any significant changes in patron interactions or traffic patterns.

FEATURE

LITERATURE REVIEW

For decades, librarians have assessed the success of physical, dedicated reference desks and explored new reference and staffing models to meet changing user needs. The goal of this study is to explore the effect of consolidating to a single service desk in a branch library by reviewing transaction data before and after the desk merger, as well as to identify overall transaction trends over time. Therefore literature relating to reference service models, the merging of reference and circulation service points, and analysis of transaction data, in addition to literature specifically about music and the performing arts reference services, is most relevant.

Many authors have explored the various types of models for providing reference services in academic libraries. In a review of the literature regarding current trends in reference services, Bandyopadhyay and Boyd-Burns discussed the transformation of reference services in academic libraries (roving, tiered, and virtual) and the effects of library instruction, supplemental digital resources, and embedded librarianship on reference transactions.6 They also reviewed current trends in reference transactions and current trends in staffing reference services, finding that mediated reference services and human interaction are still important features of quality service. Frederikson and Wilkinson also conducted a literature review exploring the rationale of changing models, noting that these are usually either structural and budgetary or change-management endeavors.7 The benefits of changing service models cited in the literature include increased use of services, clarification of services, decreased frustration for users, and cross-training of staff, while challenges included the unexpected absence of cost savings and the difficulties in assessing success.

In 2000, Jackson surveyed the heads of reference in ARL libraries to determine if services were changing in response to a decline in reference activity and found that while reference services were changing, this change was not nearly as dramatic as many had thought.8 Twelve years later, Wilson surveyed heads of access services departments in 100 ARL libraries to determine the current composition of these departments and whether they were combining circulation and reference.9 Wilson found that "despite calls from and examples in the literature, the idea of combining reference with the Access Services organization is not prevalent in ARL Libraries."10 Of the 63 responses received, only 8% included reference in their access services departments and only 14% had combined reference and circulation desks, with another 20% expressing a plan to combine desks. The trend of combining these functions at a single service desk was not exemplified in ARL libraries.

Various case studies have been published about merging of service points in libraries, including successful and unsuccessful outcomes. Crane and Pavy at the University of New Orleans described how their reference and circulation (and eventually media) service points were merged into a single service point, using reference librarians at the desk only during peak hours and developing an "on call" system.¹¹ While there were concerns regarding the merger, the authors found many benefits to patrons and staff, including patrons being able to receive assistance from more broadly knowledgeable staff at one location due to cross-training. In addition, staff reported an increased level of job satisfaction due to having a greater variety of tasks and increased staff cohesiveness at the desk. Flanagan and Horowitz wrote about how MIT Libraries successfully integrated service points at one of the five main libraries on campus.¹² While they found that there were no quantitative changes after their merger, reference statistics stayed consistent, surveys showed that patrons felt their needs were being met by the new model. Kiesling and Sproules provided a description of the merging of service points at the largest library at the University of Louisville after seeking user feedback through surveys and an advisory board.¹³ After assessing the results, it was determined that reference staff members should no longer staff the service desk; instead a consultation model was implemented to allow for in-depth research support. Hunter and Anderson described how the University of Missouri-Kansas City successfully combined reference and circulation services in a single service point.¹⁴ This helped eliminate previous patron dissatisfaction resulting from having to travel between desks. For patrons experiencing referrals in the new model, "it appears more like getting help from multiple people than being passed back and forth."15 Abrams outlined University of California San Diego's process of merging two libraries and an individual service point (including the Music Library) into one space.16

Not all mergers described in the literature were deemed successful. Fritch, Bonella, and Coleman conducted surveys, focus groups, and a quantitative analysis of transaction data to review the desk merge at Kansas State University Libraries.¹⁷ They found that, while there were many positive consequences, this desk merge was not an ideal solution, eventually re-separating reference from circulation.

Several studies have assessed transaction data to provide insight into activity, determine appropriate staffing levels, and explore the need for or success of desk mergers. After reviewing data from the Academic Libraries Survey conducted by the National Center for Education Statistics and ARL statistics, Applegate found that while all types of libraries have seen a decline in reference transactions. ARL libraries and other doctoral institutions have seen more of a decline.¹⁸ Lenkart and Yu analyzed transactions that occurred at five specialized and two general reference service points.¹⁹ Their analysis showed that there was a strong correlation between question difficulty levels (as measured on the READ scale) and the time spent on transactions, which was especially true at the specialized service points. Compared to the main reference desk, these specialized service points also answered more questions with higher difficulty levels.

Ryan describes a project at Stetson University that analyzed transactions collected over several years to determine cost-effective staffing.²⁰ These transactions were coded into
directional, look-up, technology support questions, and reference, which were further categorized. Ryan found that only 11.3% of transactions were complicated enough to require librarians, stating that "this study included enough concrete data to prove that many of the transactions are simple enough to be addressed by trained staff, or even by students."21 Raftus and Collins also assessed reference services at three of the University of Washington campus libraries to determine appropriate staffing.22 Similar to our study, they used Desk Tracker and READ to capture transaction data. They found that over 70% of transactions fell into READ levels 1-2 range that all staff should be able to answer, 27.5% fell into READ 3-4 range (typically readyreference and basic reference queries),

and fewer than 2% fell into READ levels 5-6. As a result of these findings, the libraries adjusted service desk and staffing models. Furthermore, the Engineering Library specifically decided to merge service points but kept librarians and LIS students at a nearby on-call desk because they often received specialized level 3 and 4 questions. Bishop and Bartlett from the University of Kentucky Libraries analyzed 1,852 reference transactions in their library system to better understand the content of transactions to inform staffing and develop a mobile library app.²³ Their results showed that most questions were location-specific directional or policy questions, and that only 16.3% were subject-based questions that required professional help. McClure and Bravender analyzed reference activity at Grand Valley State University to determine whether consolidating service points would affect their reference service.²⁴ After conducting a content analysis on recorded activity, they found that librarians answer more reference questions overall because staff at the service desk successfully refer appropriate questions, and that a singleservice on-call reference model works for their institution.

Additional studies have examined transactions focusing on the point of first contact. Mosley analyzed 2,000 transactions at Texas A&M University's Evans Library loss prevention specialist desk, located closest to the door and often the point of first contact for patrons, finding that many interactions still require a basic understanding of the reference interview and details of library information services and resources provided to the user population.²⁵ Location is often a concern when considering merging service points to a single desk.

While authors have explored topics such as embedding music reference services and music virtual reference,²⁶ the contemporary literature directly related to describing and assessing reference services physically occurring in music libraries is limited. In 2004, Hursh surveyed music libraries about whether they had a dedicated reference desk and their

| AD Scale [hide help] |
|--|
| uick Guide: 1: Directional/Hours; Pointing 2: Policies; VUFind Known Item search; Call Number questions; Scanners/Printers/hardware issues; 3: Reference Training Required; Ready Reference; Research Assistance using only 1 source; SFX/EResource troubleshooting; Journal/Article questions; 4: Research Assistance requiring multiple sources; 5: Research Assistance requiring multiple sources and subject specialty; very long 6: Multi-day research assistance, lots of back and forth with patron |
| r more details see: tp://www.library.illinois.edu/assessment/readscale.html |



reasoning.27 Hursh found that dedicated reference desks are not standard for music libraries, but many respondents expressed an interest in establishing such desks. To address changing patron needs and expectations, Dougan outlined various assessment tools available to music libraries including the READ scale and the Wisconsin Ohio Reference Evaluation Project (WOREP).²⁸ Newcomer and Hursh used Durrance's "Willingness to Return" methodology and evaluated services through patron surveys and an analysis of reference activity statistics in a music library.²⁹ They found that the existence of a dedicated reference desk did not increase the likelihood of patrons seeking expert assistance elsewhere when the desk was unstaffed. Newcomer and Hursh also found that while librarians at the reference desk were the preferred source of assistance, patrons preferred immediate assistance overall, regardless of source.

METHODOLOGY

Many libraries and other service points that make up the University Library at the University of Illinois have used Desk Tracker software since 2008 to track patron interactions. MPAL began tracking patron interactions using Desk Tracker in 2008 and incorporated the READ scale in 2013. READ, the Reference Effort Assessment Data scale, is a six-point scale that helps libraries measure the effort and knowledge required on the part of the library staff and the amount of instruction involved.³⁰ In general, READ levels 1 and 2 are used for questions that staff at every level should be able to answer; anything that requires specific reference training or subject knowledge should be tracked as level 3 or higher, with levels 5 and 6 requiring a significant amount of time and skill (see figure 3).

MPAL locations where data has been tracked over the years include Circulation 1, Circulation 2, Reference Desk,



Figure 4. Desk Tracker Activity Form

Office, Off Campus, and Second Floor. This information is recorded when staff log in to Desk Tracker. While most of the location options refer to a single desk, Office can be used in any staff office in the Library and Off Campus can be used by any staff member conducting work out of their office. Prior to the merge, Circulation 1 and Circulation 2 were equally responsible for circulation and basic directional questions. Since the merge, the Reference Desk and Circulation 2 are the same workstation, although staff who do not provide reference services will log in to DeskTracker using Circulation 2 (see figures 1 and 2).

MPAL's current policy states that any person positioned at the primary first-floor circulation station (Circulation 1) should focus on performing circulation functions and answering basic directional questions, and to refer questions requiring reference skills to reference staff when present. The exception to this is if they are one of two paraprofessional staff members who also serve on the reference desk. Therefore there should be very few reference transactions tracked at circulation locations, including Circulation 1, Circulation 2, and the second floor.

Desk Tracker is used for all interactions with the exception of regular circulation transactions, which are materials that patrons bring to the desk, and with all patron types from undergraduates to visiting scholars. The only circulation transactions at MPAL that are tracked using Desk Tracker are those that are considered "paged items," such as course reserves, closed stacks media, loanable technology, or listening room/ carrel keys, which must be retrieved by staff. The online Desk Tracker form tracks location, patron type, status of staff, whether it was a scheduled appointment, mode of communication, time spent, question type, READ level, subject (or academic discipline), whether the question was referred to a specialist, if government information was used, and a description of the question (see figure 4).

The "Question Type" field has to do with the nature of interactions, rather than their subject (music, dance, theatre, etc.). Options included in this field include "Data Assistance" (which should rarely occur at MPAL), "Database/ eJournal, SFX Access Problems," "Directional/Hours," "Finding Specific Library Materials," "Library Policies and Services," "Other," "Ready Reference," "Research Assistance," and "Technical Issues (printers, scanners, software)." While many of these categories are selfexplanatory, it is important to point out that the category labeled "Finding Spe-

cific Library Materials" includes finding a known item (e.g., a recording of Verdi's *Macbeth* or parts for a Beethoven string quartet) in the catalog, but not finding an item on the shelf when a call number is already known, which would instead be "Directional/Hours." Known-item queries are a common type of transaction in most music libraries in part because of the inherent difficulties in searching for music materials in library catalogs.³¹

The Library Assessment Coordinator generated reports from Desk Tracker for READ and Question Type information cross-tabulated by location for each calendar year from 2013 to 2017, allowing a comparison of transaction trends overall. It also allowed for a comparison of the time spans from 2013 to 2015 and from 2016 to 2017, before and after the desks merged. We also compared MPAL data to University Library Desk Tracker data overall for the same time period. Data pulled from Desk Tracker is not a complete representation of all transactions occurring at MPAL service points because it doesn't include standard circulation transactions, but also because it is dependent upon individuals using Desk Tracker regularly and filling the form out completely. Capturing consistent data is difficult due to evolving standards and the complex working environment, but the data extracted is still useful for analysis and can provide insight into trends occurring at the desks.

| Table 1. All Transactions by MPAL Location 2013-2017 | | | | | | | | | | | |
|--|----------------|-------|-------|-------|-------|--|--|--|--|--|--|
| | 2013 | 2014 | 2015 | 2016 | 2017 | | | | | | |
| Circulation 1 | 2,575 | 1,402 | 1,681 | 1,716 | 1,997 | | | | | | |
| Circulation 2 | 1,723 | 757 | 781 | 121* | 30* | | | | | | |
| Reference | 1,528 | 1,235 | 840 | 1,469 | 1,786 | | | | | | |
| 2nd Floor | O [†] | 36 | 164 | 161 | 18 | | | | | | |
| Office | 176 | 155 | 87 | 101 | 149 | | | | | | |
| Off Campus | 3 | 12 | 11 | 6 | 5 | | | | | | |
| Total | 6,005 | 3,597 | 3,564 | 3,574 | 3,985 | | | | | | |

* Staff working evenings and weekends in 2016 and 2017 at the reference station still log in as Circulation 2 if they are not reference staff.

† The 2nd floor service desk was not open in 2013.

FINDINGS

The goal of this study is to show any significant changes in patron interactions based on amount or type of questions occurring at specific locations (i.e., reference desk vs. circulation desk). While trends over time are necessary for context, the chief concern is whether there are any changes in patron interaction data that can be tied to the consolidation of the reference desk with the circulation desk.

Trends by Transaction Location

Patron interactions, not including generic circulation transactions, can best be analyzed in aggregate by their location (see table 1). Patron transactions decreased from 2013 to 2014 by 40% across all locations. From 2014 to 2016 transaction levels were quite stable, with a slight dip from 2014 to 2015 and a slight rise from 2015 to 2016. In 2017, transaction levels rose significantly (by 12%) over the previous year.

When looking at activity occurring at specific locations, activity at the first-floor circulation stations dropped 50% in 2014. However, after this large drop, activity at "Circulation 1" increased steadily between 2014 and 2017. Overall, activity at "Reference Desk" dropped by 45% from 2013 to 2015 (by 19% from 2013 to 2014 and 32% from 2014 to 2015), but increased by 75% in 2016, which is not completely unexpected, since post-merger it now serves the dual functions of the second or backup circulation point and the reference desk. This is also why activity logged at "Circulation 2" dropped to almost nothing in 2016, since that station is now usually signed in as "Reference Desk" in Desk Tracker, with the exception of nights and weekends when reference staff do not occupy the station. "Circulation 2" and "Reference Desk" transactions combined decreased from a total of 1,621 transactions in 2015 to 1,590 transactions in 2016, which is only a 2% decrease. In 2017 transactions logged at these two locations totaled 1,816, which is a 14% increase over the previous year. However, the three first-floor stations, when taken in aggregate, decreased by 17% from 2013 to 2017.

Activity tracked in staff offices ("Office") declined noticeably in 2015 from the previous year (44%), likely in part because one of the two librarians on staff split their time between MPAL and another campus library from August 2015 to May 2016. In addition, one librarian retired in May 2016 and was not replaced until June 2017. However, despite this, "Office" activity increased 16% in 2016 and 48% in 2017. While the stabilization of librarian staffing levels likely played a large part in this increase, it is also possibly due in part to the increase in research appointments made with librarians, as it is more difficult to conduct longer one-onone sessions at the combined desk.

The second-floor service point was not reopened until January 2014 and is only open Monday–Friday afternoons. The use of Desk Tracker was not implemented immediately, meaning data from 2014 are not necessarily complete. Traffic for 2015 and 2016 was fairly consistent, and the large drop seen in 2017 was primarily due to technical difficulties that prevented the individual from using Desk Tracker at that computer.

Trends by Type of Question

Another informative way to look at overall trends in patron transactions is to view them by type of question asked (see table 2). This analysis is based on a smaller set of data, since "Question Type" wasn't a required field in the library's Desk Tracker until July 2015 and was recorded less frequently, especially at the circulation stations, before that time. "Directional/ Hours" questions declined only slightly in 2016, which is unexpected given the installation of the new School of Music Information Desk across the building lobby from MPAL. Activity in "Library Policies and Services" declined in 2014 and 2015, but increased significantly in 2016 when the desks merged, and by 2017 was again approaching 2013 levels.

While "Ready Reference" and "Research Assistance" activity declined significantly from 2013 to 2016 (by 80% for "Ready Reference" and 74% for "Research Assistance"), they both increased from 2016 to 2017 (by 7% and 14%, respectively). "Finding Specific Library Materials" decreased

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|-------|-------|-------|-------|-------|
| Directional/Hours | 570 | 391 | 366 | 340 | 333 |
| Database/eJournal, SFX Access Problems | 15 | 5 | 17 | 16 | 16 |
| Finding Specific Library Materials | 977 | 773 | 785 | 742 | 842 |
| Library Policies and Services | 277 | 265 | 241 | 294 | 266 |
| Other | 125 | 114 | 888 | 1,795 | 2,167 |
| Ready Reference | 172 | 51 | 59 | 35 | 40 |
| Research Assistance | 307 | 212 | 169 | 99 | 113 |
| Technical Issues (printers, scanners, software) | 376 | 414 | 372 | 246 | 199 |
| Total | 2,819 | 2,225 | 2,897 | 3,567 | 3,976 |

by 21% from 2013 to 2014, they were mostly stable between 2014 and 2016, but increased significantly from 2016 to 2017 (13.5%). When looking at the breakdown of MPAL's transactions as a whole, "Finding Specific Library Materials" interactions account for 27% of MPAL's transactions from 2013 to 2017, or 40% of all transactions excluding those in the "Other" category (because the majority of "Other" transactions are not true questions but are paged item retrieval).

Transactions logged as "Other" increased significantly in 2015 over the previous year (by 679%), in 2016 (by 102%), and again in 2017 (by 21%). One of the common types of transactions logged as "Other" consist of items paged by staff members. In 2015, 87.5% of transactions tracked as "Other" were also tracked as paged items. This trend continued in 2016 with 89% and in 2017 90.5% of "Other" transactions being paged items. Many of the types of items paged by staff were added to the circulating collection during the time period covered by this study, including iPads, CD/DVD drives, and listening room keys. Since they were added to the catalog in August of 2014, the six listening room keys have circulated more than 3,800 times. The increase in "Other" could also be in part because Question Type wasn't a required field until July 2015 and individuals may not have had enough training or reminders as to how to designate question types, even though it had been encouraged in use at MPAL since beginning to use Desk Tracker in 2008.

Trends at Specific MPAL Location by Question Type and Year

At a more detailed level, it is possible to examine trends in the types of questions asked at each location from year to year, again with the caveat that Question Type was not always a required field. In order to uncover any changes in interaction patterns at the various locations after the desk merger, the data was analyzed for shifts in patterns from 2013–2015 against data from 2016–2017.

Before the consolidation, the most common type of transaction at the "Circulation 1" location was "Finding Specific Library Materials" followed by "Other," and "Directional/ Hours." After the merger, "Other" became the most frequent interaction type, followed by "Finding Specific Library Materials" and "Directional/Hours." At the "Circulation 2" station, the most common types of interactions before the merger were "Finding Specific Library Materials," followed by "Other," and "Directional/Hours." After the merger "Other" and "Finding Specific Library Materials" traded spots.

Prior to the merger, the most common interactions at "Reference Desk" were "Finding Specific Library Materials," "Technical Issues," and then "Directional/Hours." The old reference desk was closest to the printers and scanners, which is why it fielded so many technology-related questions. Post-merger, "Other" moved into first place, followed by "Finding Specific Library Materials" and "Directional/ Hours." For comparison, in 2016 "Finding Specific Library Materials" were down at "Circulation 1" from the previous year by 14% but up at "Reference Desk" by 44%, and in 2017 were up from 2016 by 21.5% at "Circulation 1" and by 29% at "Reference." In 2017, "Ready Reference" and "Research Assistance" were again up at "Reference Desk" (by 44% and 54%, respectively) and again down at "Circulation 1" (by 20% and 57%). This indicates the likelihood that in addition to an overall upturn in "Finding Specific Library Materials" activity, there is an increase in proper referrals from the circulation station to the reference station.

The most common interactions in staff offices ("Office") are "Finding Specific Library Materials," "Research Assistance," and the "Library Policies and Services." The most common interactions logged "Off Campus" are "Finding Specific Library Materials," followed by "Ready Reference." We did not assess transactions at the second floor service point due to technical issues that caused tracking difficulties at that station.

Trends by READ Scale Levels and Location

Between 2013 to 2017 the percentage of transactions at all MPAL service points with a READ level assigned has not changed dramatically from year to year, with 40%, 50%, 41%, 37%, and 43% of transactions assigned a READ level

each year, respectively. By raw totals, the number of transactions assigned a READ value mostly follows the pattern found in all transactions, with the highest numbers in 2013, decreases from 2014 to 2016, and an increase 2017 (see figure 5).

In comparison, the percent of transactions with a READ level assigned occurring at "Reference Desk" has changed significantly (see figure 6). During the pre-merge period, the percentage of transactions with a READ level assigned was 89% in 2013 and dropped slightly to 84% in 2015. After the merge in 2016, the percentage of transactions with a READ level assigned dropped dramatically to 54% but rose slightly in 2017 to 61%. This change may be reflective of the increase in paged item transactions reference staff members are now handling that do not require a READ level (although they could be assigned one) since types of transactions do not necessarily require reference skills, knowledge, or training. In 2017, there were 3.985 transactions across all locations. of which 1.786 occurred at "Reference." From total transactions, 1,696 were assigned a READ value, 1,089 of which were at "Reference," which shows that the preponderance of interactions assigned a READ value occur at the reference desk.

Of more importance are any statistically significant changes in the levels of questions asked at "Reference Desk" and at the first-floor circulation points ("Circulation 1" and "Circulation 2") before and after the consolidation of service desks (see figure 6). While transactions at READ levels 1 and 2 can be answered by

all levels of staff, looking more closely at trends can illustrate changes in the work done by reference staff now located at a multi-function service desk. At the first-floor circulation points, READ level 1 decreased by 18% after the desk merger in 2016, while there was a 50% increase in transactions assigned this READ level at "Reference Desk" and another 80.8% increase in 2017. Prior to the merger, READ level 1 at "Reference Desk" was most often used to describe "Directional/Hours" and "Technical Issues" type questions. After the merger, it is most often used for "Other" (mostly paged items), followed by "Directional/Hours" and "Technical Issues" questions. The overall increase in this level of transaction in addition to "Other" being the most common Question Type, demonstrates the significant increase in reference staff supporting circulation functions by paging items.

The number of transactions assigned a READ level 2 did



Figure 5. READ Level by Year, All locations



Figure 6. READ Level by Location and Year

not change dramatically after the desk consolidation. READ level 2 at "Reference Desk" is most often assigned to "Finding Specific Library Materials" and "Technical Issues." In the case where there is a known title for the item (i.e., a monograph title), "Finding Specific Library Materials" should be assigned a READ level 2. However, a significant number of questions posed in music libraries are finding printed music and recordings of musical works. These "Finding Specific Library Materials" questions are considered a READ level 3 because of the added difficulty and subject knowledge often required. The prevalence of "Finding Specific Library Materials" with a READ level 2 designation and not 3 may be due to the "Quick Guide" for the READ scale on the U of I Desk Tracker form that lists known item searches as READ level 2. which is true in many other campus libraries (see figure 3). Transactions assigned READ levels 3 and 4 require reference knowledge

| | All Libraries that Track | % of Total for All | MPAL Subset | % of Total for MPAL |
|---|--------------------------|--------------------|-------------|---------------------|
| Finding Specific Library Materials | 76,913 | 25.27 | 4,119 | 26.6 |
| Database/eJournal, SFX Access Problems | 5,724 | 1.88 | 69 | 0.45 |
| Directional/Hours | 67,391 | 22.14 | 2,000 | 12.92 |
| Library Policies and Services | 56,925 | 18.71 | 1,343 | 8.67 |
| Technical Issues | 30,988 | 10.18 | 1,607 | 10.38 |
| Research Assistance | 30,307 | 9.96 | 900 | 5.81 |
| Other | 27,826 | 9.14 | 5,089 | 32.87 |
| Ready Reference | 8,250 | 2.71 | 357 | 2.31 |
| Total | 304,324 | | 15,484 | |

Table 3. MPAL vs. Overall Desk Tracker Participants 2013–2017

and experience with the reference interview, and as such are the types of transactions that reference staff and not circulation staff should be handling. After the desk consolidation in 2016, transactions assigned READ level 3 at the first-floor circulation stations decreased by 48.4% and transactions assigned READ level 4 decreased by 29.3%. This decrease may mean that circulation staff are less likely to take on reference questions now that reference staff are in closer proximity.

READ level 5 and 6 transactions are more in-depth questions that take extended amounts of time and do not normally resolve at the desk. The decline in these levels of questions occurring across all MPAL locations is to be expected as more students are scheduling time for research consultations when they have difficult questions. While there was an overall decrease in level 5 transactions, part of the reason for this at "Reference Desk" specifically might be because reference staff are now also providing circulation support and do not have the time to dedicate to longer, more in-depth questions at the desk.

MPAL vs. Overall Desk Tracker Participants in the University Library

In comparing MPAL's data to the Library as a whole, we found that patron interactions at MPAL are more alike than different across the various libraries, with the exception of the "Other" category (see table 3). The use of "Other" at MPAL is high because of the number of items held in closed stacks (media, special collections, loanable technology, etc.) that staff must retrieve for patrons. Excluding the "Other" category, "Finding Specific Library Materials" was the most predominant interaction type across all libraries and "Directional/Hours" was second.

DISCUSSION

It can be difficult to identify clear cause and effects reflected in transaction data due to the subjective manner in which it is collected and the numerous environmental variables at play. The context of the local setting must be considered, as well as more qualitative factors such as impacts on reference staff.

Environmental Impacts

It is not possible to determine what exactly caused the large change in MPAL patron transaction totals from 2013 to 2014, but one possible factor is enrollment decreases in the areas MPAL serves. In 2014 there was a 3.7% decrease enrollment in the School of Music, Department of Dance, and Department of Theatre across all degree types, with a 4.3% decrease in the School of Music. There were increases in each of 2015 and 2016 across all three areas and by 2017, there was a 1.6% overall increase in enrollment across the three areas (1.1% in the School of Music) over 2013 levels.³³

Another possible factor in 2014's large transaction decrease could be the addition of a subscription to the audio streaming tool Naxos Music Library in late July 2013. This acquisition could have caused changes in media circulation and course reserves use patterns (course reserves and media are tracked as paged items in Desk Tracker and would contribute to Desk Tracker totals). Additionally, patrons frequently use the reference desk to ask for help finding call numbers for CDs and course reserves since they are shelved in closed stacks. The trend of collection formats impacting service transaction levels will likely continue in MPAL as additional streaming media subscriptions and other e-resources and e-journals were added in 2018. Furthermore, the technology that connects patrons to the library's electronic resources (such as the link resolver SFX) has increasingly better functionality, which may decrease patrons' need to contact library staff for help finding journal articles online or on the shelves.

Although there was a significant drop in "Technical Issues" questions at "Reference Desk" post-merger, the library's printers were relocated in January 2018. The service desk is now situated between the printers and the public computer and scanner area, with the reference station closest to the printers, so there may be an increase in those questions at "Reference Desk" in the future. Also, a new printing payment system was launched in 2018, which could increase MPAL's statistics, at least during the initial phase of rollout.

A possible factor in the upsurge in transactions in 2016 and 2017, as previously mentioned, is the circulation of loanable technology and group room keys. We expect to see this trend of increased interactions in this area continue, as the rooms were upgraded in 2018 with new displays. In addition, a new room reservation system was launched, which may increase the visibility and usage of the rooms. Additional loanable technology items are also under consideration. We also anticipate seeing an increase in transactions at the second floor service point now that technology issues have been resolved at that circulation workstation. Had tracking been possible there in 2017, we might have seen an increase, as a marketing campaign was launched in November 2016 to remind people that our LPs circulate even though they are located in the closed stacks behind the second floor service desk.

Impacts on Reference Staff

The Desk Tracker data shows that reference staff have become busier at the desk since the merger, and this could be due to a variety of reasons. Reference staff are answering a broader range of questions now that they are also fulfilling circulation functions, including paged item transactions and other low-level questions, as evidenced by the increase in Level 1 questions at "Reference." There is a notable increase in "Finding Specific Library Materials," "Ready Reference," and "Research Assistance" activity at the Reference station with corresponding decreases at "Circulation 1," which illustrates that referral practices have improved. This growth in traffic for reference staff has a concrete impact on their abilities to do project work or to offer in-depth help at the desk, both of which must happen in "Offices" and traffic for this location has increased.

This specifically impacts the librarians, who are primarily the ones who track interactions in the "Office" location. Whereas before, queries that arrived via phone and email could be saved to work on while a librarian had a shift at the desk, now much of that work needs to happen in offices because there is not time due to the upturn in activity at the service desk. Additionally, with two librarians since mid-2017, there is more capacity and availability for librarians to work with patrons who have been referred from the service desk in their offices. The introduction of research consultation scheduling software also makes it easier for patrons to arrange a meeting in advance. This raises the question of whether it is worth having "expensive" librarians at the reference desk when graduate assistants or undergraduate student assistants might be trained to do this work and refer questions appropriately. MPAL already makes use of graduate assistants at the reference desk and finds it successful,

but the recurring training that would be required for undergraduates due to turnover is currently unrealistic.

Limitations in Data

The primary limitation to this study is the data itself. As others have noted, there will always be difficulties with collecting accurate data at busy service desks.³⁴ We know that staff are not always tracking completely or correctly based on some of the entries we see (Level 6 questions at all, Level 5 anywhere other than "Office," any use of "Data Assistance," etc.) and that there will always be some level of human error. A lot of the information tracked is based on personal interpretation, and while efforts are made to realign these interpretations, it will never be perfect. Also, quantitative data only provides part of the picture about what occurs at a library service desk.

Next Steps and Further Research

Since reviewing this data, new training has been implemented regarding use of Desk Tracker to ensure that all individuals are comfortable with using the form and the READ Scale. This was done in a two-part approach, with staff members filling out an anonymous training exercise online and then once the authors had reviewed the results, having a joint meeting with all staff to go over the questions and most appropriate responses. While student staff participated in the online exercise, it was not possible for them to attend the meeting, so a brief summary was shared. Moving forward, we plan to encourage all staff members to use Desk Tracker in their offices to track any patron interactions that might happen there. This makes us consider whether there is other data we should or could be tracking in Desk Tracker. An option for tracking reproduction requests was added in late 2017 at MPAL's request, since this is something that is a frequent occurrence given its rich and unique Special Collections but that is tracked in no other way. Perhaps purchase requests from patrons, fine and billing questions, and requests to put materials on course reserves should also be tracked through Desk Tracker-essentially any interactions with patrons regarding services. This will require a conversation with the Library Assessment Coordinator about overall practices and philosophy of tracking across the University Library.

Another consideration going forward is the potential to implement alternate staffing models. MPAL is somewhat different than other libraries at the University of Illinois (and perhaps from other music libraries) in that librarians staff its service desk. For example, the Main Library's Information Desk and Social Science, Health, and Education Library also use this model, while most other branches staff their desks with paraprofessional staff and graduate and/or undergraduate students only. However, removing librarians completely from the MPAL service desk except on an on-call basis would not work very well. This would require each of the

two librarians to be on call for twenty hours a week, which would severely impact their ability to do service and other work. Many academic libraries have gone to a scheduled consultation model for reference assistance, which is essentially what MPAL already has for most in-depth research queries. Further research could include a survey of music librarians to see what service models they use and how much of librarian time goes to desk shifts or reference work off desk, depending on their role.

It is difficult to ascertain why transactions post-merger have increased, as it could be due to a number of factors. For example, it could indicate that patrons now receive better and/or more efficient service and therefore come to the desk more often. Or it could indicate that not enough instruction is occurring at the desk and patrons return because they have not learned how to find the information themselves. Alternately, it could be some other variable as yet unidentified. Human interactions and patron intention and satisfaction are impossible to measure with this type of tool. MPAL previously did a study to measure service effectiveness and patron satisfaction and could re-run that study or a similar one.³⁵ Reference staff are now in a better position (literally) to ask if patrons found everything they were looking for when acting as circulation backup and to interject in an interaction in which a circulation staff member needs assistance. We plan to continue to review Desk Tracker statistics annually in conjunction with all other data available such as circulation data and our space usage tracking efforts to help us understand how our library is being used and how it may need to evolve to meet patron needs. It will also help us to see where training in using Desk Tracker and READ may continue to be needed.

The data in this study does not speak to how (or if) patrons benefit from having subject-specialist librarians at the service desk. Further research can be done to measure whether it insures the shortest amount of time between a patron posing a question and receiving a satisfactory answer given the complexity of music materials. As Poparad noted when discussing the benefits of librarians at the desk, "Hearing the students' questions firsthand at the desk informs how we teach in the classroom, in consultations, and through our online guides and tutorials."³⁶ We feel there is still a considerable benefit to having librarians scheduled at the desk since transactions there have led to instructional and collection development opportunities. This allows the librarians to see directly the interactions between patrons and collections, leading to a more holistic approach to service writ large.

CONCLUSION

MPAL's service delivery and transaction profile is very different than it was five years ago, and it is hard to know what it might look like in another five years. The elephant in the library has long been whether having a separate reference desk matters, and there are increasing discussions over who should provide reference services. Libraries and music libraries (or at least this music and performing arts library) are seeing a decrease in number of reference assistance and other queries at the desk. As staff, resources, and patron needs continue to change, MPAL will need to continue to review available data and assess services to make service hours and staffing decisions. While the current configuration appears to be a successful change, this may prove to be less so in the future, or more effective models may arise.

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Where's the EASY Button? Uncovering E-Book Usability

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E-book platforms have multiplied among vendors and publishers, complicating not only acquisitions and collection development decisions, but also the user experience. Using a methodology of task-based user testing, the researchers sought to measure and compare user performance of eight common tasks on nine e-book platforms: EBSCO eBooks, ProQuest Ebook Central, Gale Virtual Reference Library (GVRL), Oxford Reference, Safari Books Online, IGI Global, CRCnetBASE, Springer Link, and JSTOR. Success and failure rates per task, average time spent per task, and user comments were evaluated to gauge the usability of each platform. Findings indicate that platforms vary widely in terms of users' ability and speed in completing known-item searches, navigation tasks, and identification of specialized tools, with implications for library acquisition and user instruction decisions. Results also suggest several key vendor design recommendations for an optimal user experience. The study did not aim to declare a "winning" platform, and all the platforms tested demonstrated both strengths and weaknesses in different aspects, but overall performance and user preference favored ProQuest's Ebook Central platform.

-book platforms have multiplied among vendors and publishers, complicating not only acquisitions and collection development decisions, but also the user experience. Recurring anecdotal discussions among Library faculty at Sam Houston State University remained inconclusive regarding various platforms' ease or intuitiveness of use. Researchers sought to measure and compare common tasks across nine different e-book platforms using task-based user testing. User behavior observation and direct quotes, along with quantitative data such as average time per task and success/failure rates for task completion, informed researchers of the ease, intuitiveness, and duration for eight tasks for each of the platforms tested. The researchers hope that the findings of this study will provide valuable information for other libraries making collection development and instruction recommendations or decisions regarding these various platforms, while also serving as a mode of feedback to the platforms' vendors and publishers.

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LITERATURE REVIEW

Scope of the Literature Review

This literature review focuses on the past works of most relevance to the current study based on the goal pursued and/ or the methodology employed. The aim of this literature review will be to highlight key works that have focused on evaluating the usability of e-book platforms in the desktop computer environment, particularly those works that sought to compare competing platforms, and to demonstrate how the current study fits in with and builds further upon these past works.

Many studies have compared user preferences for e-books versus print books, user acceptance of e-books, and comparative user behavior in the two reading mediums. This literature review will not attempt to detail this sizable body of work, as it is outside the scope of the present study, which aims to assess actual student interaction with different platforms in occasions when a user must use an e-book, regardless of preferences. However, one example from that body of literature worth mentioning briefly is Berg, Hoffman, and Dawson (2010), where task-based usability testing, very similar to that of the current study, was employed to compare specific e-book titles on one platform with the same titles in print.1 This study and its literature review would provide a good starting point for librarians more specifically interested in usability-based comparisons of e-book versus print formats, as opposed to comparing different e-book platforms.

Similarly out of scope for this literature review are studies focused specifically on the use of dedicated e-reading devices, the usability of e-books on mobile devices, and the use of e-textbooks (required course texts in electronic format), as they emphasize specific aspects of the e-book experience that are not pertinent to the current study.

Survey, Review, and Focus Group Methodologies

The host of studies discussing users' thoughts and attitudes towards e-books may be separated into a few categories, depending on how they approach the subject. First, there are those studies seeking to look at the usability of e-books through a variety of lenses that are pertinent to the course of this current study. One such by Hobbs and Klare (2016) sought to look at the general efficacy of student interactions with e-books through a combination of interviews and surveys.² Their findings showed that while the number of students using e-books increased, their overall proficiency with them remained flat. Reasons cited for this by the participants were difficulty in using the e-book interface, as well as difficulty using study habits acquired with print materials, such as the marking of pages with tabs. The present study will be looking at both the ease of use for the interface, as well as the availability of tools, such as note-taking. A usability study by Abdullah and Gibb discussed the various reasons that drew users toward or away from e-books.³ One negative aspect of e-books they found was the difficulty in learning new technology; the present study may help to inform further understanding of this difficulty by determining which platforms present greater or lesser barriers to intuitive use.

Comparative reviews of platforms, using e-books focused in one specific subject, comprise another category of studies pertinent to this paper. Shereff (2010) compares the various tools and features of NetLibrary and Thieme e-books with the aim of examining usability, search interfaces, and content in biomedical information.⁴ Comparison reviews such as these provide a stepping-stone for the current paper's larger comparative usability scope. A similar review by Heyd (2010) of medical library aggregators compared Net Library, R2 Digital Library, and Stat!Ref, but again, did not extend in scope beyond this focused content topic.⁵

A study by Shrimplin, et al. (2011), bears consideration; the authors used a Q methodology to divide readers into four categories,⁶ from which they determined that individual attitudes towards e-books range between utilitarian and emotional.⁷ The two emotional categories were Book Lovers and Technophiles, while the utilitarian categories were Printers and Pragmatists. Printers were those users who would increase their use of e-books if the usability of the interface were to be improved, highlighting the importance of usability in repeat use of e-books.

The professional literature is replete with librarians' reviews of individual e-book platforms, or detailed comparisons of multiple platforms. These provide valuable assessments from the expert's perspective concerning what functions and features a platform includes or omits, how well essential tools work in a given environment, and treatment of aspects such as ADA accessibility. One key example is a work by Tovstiadi and Wiersma (2016), who conducted a rubric-based evaluation of 20 publisher and aggregator platforms to gauge and compare usability.8 Their rubric used the CRL (Center for Research Libraries) Academic Database Assessment tool9 as a foundation and incorporated additional evaluation from the e-book Accessibility Project. Using the rubric, the researchers assessed each platform in regards to 34 elements important to usability and user experience, such as pagination, table of contents, native citation tool, search functionality, zoom, annotation, and more. A follow-up work by the same authors, published in 2017, elaborates on the use of rubrics to compare metadata and search results for the same e-book titles on different aggregator and publisher platforms.10 These two papers provide an excellent assessment of comparative platform usability, but these studies (and the entire genre of librarians' expert reviews) stop short of studying actual user interaction with each platform.¹¹

A different approach for studying usability is the focus group. Caroline Gale (2016) used focus groups to compare several platforms for ease of use, available features, and user preferences.¹² Across two iterations of the focus groups, students either used e-books hands-on during the session, or examined specific titles in advance of the session, then provided feedback concerning problems, advantages and

disadvantages, and likes and dislikes. The focus groups found that students:

- liked clear, uncluttered reading interfaces and quick loading times;
- disliked the difficulty of annotating;
- generally lacked interest in "added features" such as note-taking;
- preferred to download the whole e-book versus chapters; and
- desired content that could be downloaded in PDF and retained.

Although the study lists some of the main aggregator platforms that the library uses, "including VLe-books, dawsonera, MyiLibrary, ebrary, EBL and EBSCO," the author is not explicit about whether all platforms were examined; furthermore, the specific points of praise and criticism shared from the student focus groups are not tied to specific platforms in the article. Therefore the article describes general strengths, weaknesses, and preferences without evaluating individual platforms. Furthermore, the study's scope did not include observation of how the students actually interacted with each platform.

Most recently, a study by Tracy (2018) sought to look deeper at user choices and preferences for print versus electronic by examining the variations in e-book platforms that may affect user choices.¹³ In the study, 62 participants completed online diary forms over an eight-week period, documenting instances of e-book use and deliberate e-book avoidance in academic use contexts. The forms collected details such as the e-book used, the tasks completed, and which e-book features users found "easy or challenging to use," or for instances of avoidance, the reasons for avoidance and alternate formats or content used.14 Participants were also interviewed during the study to discuss the usage challenges described in their diary forms. Examples of aspects where the study identified room for platform improvement included platform "clutter," navigation, page numbering, search function, and downloadability and portability. The current study provides the opportunity to build upon and validate or refute these findings through user testing.

Task-Based Usability Testing Methodology

Finally, the current study's use of task-based usability testing builds upon an existing history of studies involving similar methodology. Hernon et al. (2007), conducted taskbased usability testing where students were given a plausible research assignment from one of three disciplines and were asked to demonstrate their search strategies in approaching the assignment.¹⁵ The researchers observed what types of e-books students in each discipline used and how they used them; however, students were not limited to searching e-books only, and the researchers did not seek to compare how successful students were in interacting with different platforms. The 2008 study by Abdullah and Gibb has rightly been treated as an important work on student experiences with e-books, and it does employ task-based testing methodology.¹⁶ Student participants were asked to perform a series of search and browse tasks in a single platform, NetLibrary; the researchers compared each student's performance against that student's self-reported past experience with e-books and also conducted a follow-up web survey of student preferences for e-books versus print books. Although quite informative regarding user preferences, this study tested the usability of only a single platform and focused mostly on student reactions to that platform; the current study seeks to expand on the knowledgebase of past research by widening the focus and comparing student, as well as faculty and staff, success in task completion on numerous platforms.

O'Neill's 2009 thesis employed a research goal and methodology similar to the current study.¹⁷ Ten students (five undergraduate and five graduate) were recruited to test three platforms—ebrary, MyiLibrary, and Ebook Library (EBL) by attempting four assigned tasks. Users were divided into three groups, and each group used the three platforms in a different order, to prevent the data for any given platform from being skewed by greater or lesser experience with other platforms. After completing the tasks, participants were asked a series of follow-up questions, such as which platform they believed was easiest to use. The data was coded for key concepts and patterns of user behavior, with an emphasis on user experience versus simple quantitative measures, such as length of time or number of steps or errors. The current study builds upon O'Neill's work by expanding the comparison to a larger number of platforms, introducing rubric-based evaluation of participant task completion, enlarging the user sample to include faculty and staff, and combining qualitative data on user behavior and experience with quantitative measures such as time required to complete a task. A new study in this vein is reasonable due to significant platform upgrades in the years since O'Neill's research, including the merger of ebrary and EBL into Pro-Quest Ebook Central, the greater availability of continuous scrolling-a feature identified as desirable by O'Neill's test participants, but absent at that time in both ebrary and MyiLibrary—and other changes.

EBSCO conducted a study in 2011 to inform the process of transforming NetLibrary into EBSCO eBooks; they combined usability testing with NetLibrary log analysis, customer feedback, and formal surveys.¹⁸ The study's findings highlighted four key areas of functionality that required the developers' focus to improve user experience, namely, Discoverability, Online Viewing, Printing/Emailing, and Downloading. Unfortunately, little detail is provided about the nature or scope of the usability test performed in that study, which limits its reproducibility and presents obstacles to expanding on its place within the literature or comparing it to the current study in a more detailed fashion.

More recently, Zhang, Niu, and Promann (2017) recruited students and faculty with varying levels of e-book experience

(based on a screening survey) to participate in task-based usability testing of library e-books.¹⁹ The test involved the ebrary, Ebook Library (EBL), EBSCO eBooks, Safari Books Online, and ACS Humanities e-book platforms. Searches for e-books on specific subjects were performed from the library homepage rather than in any specific e-book platform. Users were then asked to locate specific e-book titles on different platforms, find a specified piece of information inside the e-book (such as the definition of a term), and then, "if possible, conduct the following four actions: copy the answer; highlight the answer; add a note next to the answer; and download the answer page(s)."20 Data analyzed also included time required to complete each task, number of errors, quantity of requests for help, and a tally of positive or negative comments during each task. The study's findings included the fact that beginners tended to search inside books more often, whereas intermediate or expert users preferred using the index, table of contents, or lists of figures and tables in comparison to using "Search Within" tools. Also noteworthy was participants' difficulty in understanding features, such as highlighting and note-taking, deviated from more commonly understood interactions-for example, the use of less recognizable icons without explanatory tooltips, or the need to click an intermediary button before a familiar keyboard command like Ctrl + C will function. Most of the findings discussed center around the impact that a user's experience level with e-books has on that user's behavior when attempting tasks in an e-book platform.

A presentation by Tovstiadi, Wiersma, and Tingle at the Electronic Resources and Libraries 2017 conference described a study that was coincidentally conducted around the same time as the present investigation and employed highly similar methodology.²¹ Seventeen users participated in task-based testing on three platforms each, and then were asked to rank their platform preferences after tasks were attempted; platform order was randomized during testing, just as in the current study. A total of six platforms were tested: Brill, Cambridge University Press, Ebook Central, EBSCO eBooks, ScienceDirect, and Wiley. Tasks and questions presented to users included identification of bibliographic information, opening a book, navigation within a book, searching, annotation, citation, printing a page, and downloading a chapter. Some key findings included: most students (defined as more than 50%) "found citation tools easily"; most students "used a page number box to 'jump' to a specific page when available"; most students "blamed themselves when the platform didn't perform as expected"; most students "tried Ctl + F first" for finding information within a book; students showed a clear preference for aggregators over publisher platforms; and content providers should "use universally recognized icons/terminology."22

Tovstiadi, Wiersma, and Tingle selected e-book titles available on multiple platforms (two aggregators and the publisher), which was advantageous in decreasing variables; the present study instead selected a unique title on each platform, which had different advantages. This permitted the consideration of a broader selection of platforms and content areas while also providing a better opportunity for "fresh eyes"—in other words, with a greater diversity of subjects and platforms, each participant was more likely to encounter something unfamiliar, for which they could not simply rely on past experience. The current study set its sights on a different selection of platforms than those tested by Tovstiadi, Wiersma and Tingle; additionally it sought to measure task completion rather than just observing methods attempted, thereby offering additional insight on the topic. Furthermore, with such similar methodologies involved, direct comparisons between the findings are more relevant; therefore, the current study may also help to validate or question previous findings.

METHODOLOGY

The researchers developed a mixed-methods approach to observe user interaction with multiple e-book platforms, and to evaluate how easily, intuitively, or quickly users were able to complete tasks. The Institutional Review Board (IRB) at Sam Houston State University (SHSU) approved the study before recruitment and testing began. For context, SHSU is Carnegie-classified as "Doctoral Universities: Moderate Research Activity" (R3); total enrollment for the Fall 2016 semester, shortly before testing began, was 20,632 students.

The central methodology employed was task-based testing, in which users were asked to complete a list of prescribed tasks (available at https://hdl.handle.net/20.500.11875/2615). Researchers observed the test neutrally, but did not intervene or provide direction; the exception was Task 1, which required that the e-book be opened in order for subsequent tasks to be possible. Tasks were drawn from real needs that the researchers had observed through course assignments or during reference consultations, as well as expected user interactions with e-books.

In selecting e-book platforms to test, the researchers took a variety of factors into consideration. These included (1) the quantity of books accessible via the library on that platform, whether by perpetual access or subscription; (2) the diversity of subject areas represented by content available on the platform; (3) the uniqueness of the platform; and (4) the extent to which the platform had been absent from previous e-book usability studies. The researchers ultimately selected nine e-book platforms for testing: EBSCO eBooks, ProQuest Ebook Central, JSTOR, IGI Global, Springer Link, Safari, CRCnetBASE, Gale Virtual Reference Library (GVRL), and Oxford Reference.

The e-book platforms from EBSCO and ProQuest were included as the academic library arena's dominant discipline- and publisher-neutral e-book aggregators. IGI Global, Springer Link, Safari, and CRCnetBASE were selected as more unique, less evaluated platforms where the library had access to a relatively sizable collection of titles. Although initially excluded due to the library's smaller collection of

content, JSTOR was the last addition to the list of selected platforms. It was added in the hopes that usability feedback might inform the library's decisions about increasing acquisition of content on that platform, since its desirable DRM-free content offerings had begun to attract the attentions of librarians conducting collection development. Meanwhile, GVRL and Oxford Reference were selected to allow evaluation of platforms designed specifically for e-reference content, since these tend to differ in key ways from other platforms. One e-book title was selected on each platform, along with specific keywords in the book's contents to be leveraged in searching and navigation tasks. Finally, the researchers conducted careful investigations to determine what capabilities and features each platform provided. At this stage, the researchers were unable to ascertain that Springer offered any form of citation tool; however, while analyzing video recordings after testing, the researchers did find a single instance demonstrating that the feature was actually available.

To recruit participants, study invitations were massemailed to all enrolled undergraduate and graduate students and all employed faculty and staff; a \$10 Amazon gift card for each participant was offered as an incentive to volunteer. The researchers were concerned about being able to enlist the desired number of participants, given that participation required an average of 15–30 minutes on site in the library, and therefore cast a wide net by inviting all students rather than a selected sample. The researchers enlisted 30 testing participants, comprised of ten faculty/staff, four graduate students (two doctoral, two masters), and four students at each undergraduate level (senior, junior, sophomore, freshman). Testing appointments were made with respondents on a "first come, first served" basis until the quota was filled for a given user group; tests were conducted between January and March of 2017.

Each enrolled participant was randomly assigned a participant number, with two participants testing each defined slate of platforms (see table 1). Informed by the usability concept of randomized testing, the order in which platforms were tested was rotated to avoid any skewing of the data based on the presence or absence of experience with other platforms. For instance, a platform might rate lower if always tested first, or might rate higher if always tested last, so rearranging the order in which platforms were tested increased the likelihood of a fair evaluation.

Initially the researchers planned to test eight platforms, with every participant testing EBSCO eBooks, Ebook Central, and two additional platforms—four interfaces in total. Because JSTOR was a late addition after the number of participants was set, several participants instead tested only three platforms, reducing the number of tests for EBSCO eBooks and Ebook Central (see table 1).

Prior to each test, the study methods and goals were explained to the participant, who then signed an informed consent document agreeing to the methodology and recording. Researchers explained that the test was intended to

| Table 1. Participant Platform | Testing | Assignments |
|-------------------------------|---------|-------------|
|-------------------------------|---------|-------------|

| Participant | Platforms Tested (In Order) |
|-------------|----------------------------------|
| 1 and 16 | EBSCO, EBL, GVRL, Safari |
| 2 and 17 | EBSCO, CRCnetBase EBL, Safari |
| 3 and 18 | JSTOR, Safari, Oxford |
| 4 and 19 | EBL, EBSCO, IGI, GVRL |
| 5 and 20 | EBL, IGI, EBSCO, CRCnetBase |
| 6 and 21 | JSTOR, Oxford, IGI |
| 7 and 22 | GVRL, EBSCO, Springer, EBL |
| 8 and 23 | CRCnetBase, Springer, EBSCO, EBL |
| 9 and 24 | Oxford, Springer, JSTOR |
| 10 and 25 | GVRL, EBL, CRCnetBase, EBSCO |
| 11 and 26 | Oxford, EBSCO, CRCnetBase, EBL |
| 12 and 27 | Oxford, GVRL, JSTOR |
| 13 and 28 | Safari, EBSCO, IGI, EBL |
| 14 and 29 | IGI, EBSCO, EBL, Springer |
| 15 and 30 | Springer, JSTOR, Safari |

assess the platform, not the user, and therefore self-consciousness about right versus wrong answers was unwarranted. Participants were asked to use the "think aloud" protocol during testing to make their thought processes visible to the researchers, and they were instructed to inform the test administrator when they reached a point where they would, under normal circumstances, give up or quit their attempt. The procedures followed for the user tests are available at https://hdl.handle.net/20.500.11875/2615.

Screen-recording software was used to capture both audio and user activity in the interface, in order to allow the researchers to review tests in greater detail during data analysis. While the participant attempted each task and expressed their thoughts and reactions aloud, the test administrator watched and made notes of what methods the user attempted, along with any noteworthy user quotes. If a user quit attempting a specific task, the administrator noted this and moved onto the next task; the administrator instructed the user in completing the abandoned task *only* if necessary to progress past Task 1. After the participant had attempted all assigned tasks, the administrator asked followup questions regarding which platform they liked most and least, their past experience with the platforms tested, and their expectations regarding likely future use.

As part of assessing each platform's usability, the researchers sought to evaluate how easily or intuitively a given task could be completed in the interface. To this end, a rubric was developed that would score a user's attempt on a given task as an Efficient Success, Alternate Success, or Failure. *Efficient Success* was defined as using the method(s) that seemed to be most intended by the platform designers, as opposed to other alternate methods of successful completion (which were classified as *Alternate Success*). For

example, Task 2 asked participants to navigate to page 50 in the e-book, thus on most platforms, typing 50 into a Goto-Page function would be more efficient than clicking the *Next Page* navigation button 50 times. The researchers relied heavily on the *Help* files within each platform to inform their classification of *Efficient Success*, with the rationale that such product documentation would reflect the method by which developers intended users to accomplish a specific task. In cases where the *Help* documentation did not address a topic, distinctions between Efficient and Alternate Success were determined by discussion and consensus among the four co-authors.

Task attempts were classified as Failures when participants voluntarily quit their attempts, erroneously believed a task had been completed when it had not been, or otherwise failed to achieve the goal of the assigned task. If a task required a feature not provided by a given platform—such as note-taking—the rubric provided an option to score the task with a Null value; this way the platform was not penalized for a user's failure to interact with a non-existent tool. In instances when a user inadvertently skipped over a task, or there was a technological glitch, the researchers scored these as a Null value as well.

Initially, researchers attempted to design a single rubric to describe tasks across all platforms; in the end, however, the rubric template was customized for each platform, since the most efficient, or even the possible, methods of task completion varied so significantly between platforms. The rubrics underwent several iterative norming sessions to improve inter-rater reliability. All nine platform-specific rubrics developed by the researchers for this study are available at https://hdl.handle.net/20.500.11875/2615.

After testing was complete, the researchers reviewed the recordings to (a) score task completion according to the rubric, (b) record additional quantitative data such as the length of time to complete each task, and (c) note qualitative data such as the participants' verbal comments and researchers' observations. After data was recorded for all testing sessions, averages were calculated per platform and per task to further inform data analysis. To conduct a more comprehensive comparison of completion time results, the researchers elected to collate and assess times in both their original state and an adjusted state in which all null value sessions were assigned times derived from the overall mean time across all platforms for a given corresponding task.

To conduct a more comprehensive comparison of completion time results, the researchers elected to collate and assess times in both their original state and an adjusted state in which all null value sessions were assigned times derived from the overall mean time across all platforms for a given corresponding task. By introducing this Null Mean Substitution method into the assessment and reporting of completion time results, the researchers aimed to avoid any substantial skewing of data that would have resulted from comparing overall average time calculations across platforms possessing an inequivalent number of testable features.

While introducing mean time values into null task sessions does introduce potential for skewing of data and bias, the researchers believed this approach to be appropriate for the purpose of this research and the characteristics of the analysis. Additionally, because the overall number of completed task sessions to null sessions was largely in favor of completed sessions, the researchers identified the Null Mean Substitution method as one being acceptable in this analysis for connecting missing data points while largely maintaining the integrity of the original data. To accomplish this, the time values for all completed sessions of each task were averaged, which generated a value that was then allocated to all null sessions for the corresponding task. For example, if Task 1 incurred 10 nulls overall, and 20 completed sessions overall, the completion times for the 20 completed sessions would be averaged, and this average would then be allocated to the 10 null sessions. When reporting on overall platform completion times and their corresponding rankings, the researchers elected to incorporate both adjusted and non-adjusted times; and when reporting on individual task completion times and rankings, the researchers elected to only report adjusted times. The one exception implemented by the researchers when reporting on individual task completion times and rankings was to exclude any platform which did not offer the feature being tested for that task.

RESULTS

For the remainder of the paper, the following short-hand acronyms may be used: Efficient Success Rate (ESR), Alternate Success Rate (ASR), Overall Success Rate (OSR), and Failure Rate (FR). For additional tables of data regarding average task times and success or failure rates, refer to the Appendixes of Supplemental Tables at https://hdl.handle.net/20.500.11875/2615.

EBSCO eBooks

EBSCO eBooks achieved a 100% Overall Success Rate on Tasks 1–5 and 7; for complete data on EBSCO eBooks' success and failure rates, see table 2.

A review of average task durations placed EBSCO eBooks first place on Task 5 last at seventh of seven places on Task 3. Task 9 (turnaway message) was not timed, but saw an ESR of 95%.

Despite being unable to generate a top completion time in any task, EBSCO eBooks produced 100% ESR for three tasks, and only produced an ESR below 90% on one task. Additionally, EBSCO eBooks produced a 90% or higher OSR for all tasks. EBSCO eBooks was one of two platforms that contained all testable features. When adjusted to account for the platform's seven null values, the overall average time increased by 5.42% from 2.98 to 3.14 minutes, ranking third.

| EBSCO | Avg Task Time | Avg Task Time (sec) | ALL Avg Task Time (sec) | EBSCO ESR % | ALL platforms ESR % | EBSCO ASR % | ALL platforms ASR % | EBSCO OSR % | ALL platforms OSR % | EBSCO FR % | ALL platforms FR % |
|--------|-------------------------|------------------------|--------------------------------------|-------------|------------------------|-------------|------------------------|-------------|-------------------------------|------------|-----------------------|
| Task 1 | 4 th of 9 | 31.4 | 55.92 | 100 | 82.1 | - | 6.6 | 100 | 88.7 | - | 11.3 |
| Task 2 | 3 rd of 9 | 53.52 | 62.58 | 57.9 | 65.1 | 42.1 | 23.6 | 100 | 88.7 | - | 11.3 |
| Task 3 | 7 th of 7 | 5.47 | 4.57 | 94.7 | 96.1 | 5.3 | 1.3 | 100 | 97.4 | - | 2.6 |
| Task 4 | 4 th of 9 | 13.34 | 17.18 | 100 | 91 | - | 5.6 | 100 | 96.6 | - | 3.4 |
| Task 5 | 1 st of 9 | 21.11 | 35.6 | 100 | 82.4 | - | 7.4 | 100 | 89.8 | - | 10.2 |
| Task 6 | 3 rd of 7 | 13.77 | 21.17 | 90 | 81.1 | - | 0 | 90 | 81.1 | 10 | 18.9 |
| Task 7 | 2 nd of 4 | 22.13 | 29.98 | 95 | 89.5 | 5 | 1.8 | 100 | 91.2 | - | 8.8 |
| Task 8 | 7 th of 9 | 27.81 | 27.2 | 94.7 | 89.4 | - | 0 | 94.7 | 89.4 | 5.3 | 10.6 |
| Task 9 | - | - | - | 95 | 76.3 | - | 0 | 95 | 76.3 | 5 | 23.7 |
| TOTAL | 3 rd of 9 | 3.14 min | 4.20 min | | | | | | | | |

Table 2. EBSCO eBooks Performance Compared to All-Platform Averages

| Ebook Central | Rank by Avg Task Time | Avg Task Time (sec) | ALL Avg Task Time (sec) | Ebook Central ESR % | ALL platforms ESR % | Ebook Central ASR % | ALL platforms ASR % | Ebook Central OSR % | ALL platforms OSR % | Ebook Central FR % | ALL platforms FR % |
|------------------|-----------------------------|------------------------|--------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------------|-----------------------|-----------------------|
| Task 1 | 3 rd of 9 | 26.86 | 55.92 | 100 | 82.1 | - | 6.6 | 100 | 88.7 | 0 | 11.3 |
| Task 2 | 2 nd of 9 | 42.71 | 62.58 | 78 | 65.1 | 17 | 23.6 | 95 | 88.7 | 5.6 | 11.3 |
| Task 3 | 3 rd of 7 | 4.58 | 4.57 | 100 | 96.1 | - | 1.3 | 100 | 97.4 | 0 | 2.6 |
| Task 4 | 7 th of 9 | 21.35 | 17.18 | 93 | 91 | 7 | 5.6 | 100 | 96.6 | 0 | 3.4 |
| Task 5 | 4 th of 9 | 23.04 | 35.6 | 100 | 82.4 | - | 7.4 | 100 | 89.8 | 0 | 10.2 |
| Task 6 | 4 th of 7 | 24.45 | 21.17 | 83 | 81.1 | - | 0 | 83 | 81.1 | 17 | 18.9 |
| Task 7 | 1 st of 4 | 14.51 | 29.98 | 100 | 89.5 | - | 1.8 | 100 | 91.2 | 0 | 8.8 |
| Task 8 | 3 rd of 9 | 21.15 | 27.2 | 100 | 89.4 | - | 0 | 100 | 89.4 | 0 | 10.6 |
| Task 9 | - | - | - | 56 | 76.3 | - | 0 | 56 | 76.3 | 44 | 23.7 |
| TOTAL | 2 nd of 9 | 2.98 min | 4.2 min | | | | | | | | |

EBook Central (formerly EBL)

EBook Central produced the highest (100%) OSR on Tasks 1, 3, 4, 5, 7, and 8. EBook Central saw its worst usability in Task 9 (turnaway message), with 55% ESR, and a high 44% FR.

Nonetheless, EBook Central generated 100% ESR in more than half of all tasks, and produced top-ranked completion times in three tasks. For complete data on EBook Central's success and failure rates, see table 3.

| GVRL | Rank by Avg Task Time | Avg Task Time (sec) | ALL Avg Task Time (sec) | GVRL ESR % | ALL platforms ESR % | GVRL ASR % | ALL platforms ASR % | GVRL OSR % | ALL platforms OSR % | GVRL FR % | ALL platforms FR % |
|--------|-----------------------------|------------------------|--------------------------------------|------------|------------------------|------------|------------------------|------------|--------------------------------------|-----------|-----------------------|
| Task 1 | 6 th of 9 | 40.68 | 55.92 | 40 | 82.1 | 40 | 6.6 | 80 | 88.7 | 20 | 11.3 |
| Task 2 | 4 th of 9 | 67.14 | 62.58 | 60 | 65.1 | 30 | 23.6 | 90 | 88.7 | 10 | 11.3 |
| Task 3 | - | 4.67 | 4.57 | - | 96.1 | - | 1.3 | - | 97.4 | - | 2.6 |
| Task 4 | 8 th of 9 | 23.73 | 17.18 | 80 | 91 | - | 5.6 | 80 | 96.6 | 20 | 3.4 |
| Task 5 | 5 th of 9 | 32.97 | 35.6 | 50 | 82.4 | 50 | 7.4 | 100 | 89.8 | - | 10.2 |
| Task 6 | 2 nd of 7 | 12.16 | 21.17 | 80 | 81.1 | - | 0 | 80 | 81.1 | 20 | 18.9 |
| Task 7 | 3 rd of 4 | 35.97 | 29.98 | 70 | 89.5 | - | 1.8 | 70 | 91.2 | 30 | 8.8 |
| Task 8 | 4 th of 9 | 21.28 | 27.2 | 80 | 89.4 | - | 0 | 80 | 89.4 | 20 | 10.6 |
| TOTAL | 4 th of 9 | 3.98 min | 4.2 min | | | | | | | | |

Table 4. GVRL Performance Compared to All-Platform Averages

Among average task completion times, EBook Central ranked first of nine on Task 7. EBook Central was one of two platforms that contained all testable features. After adjusting to account for 25 null values, the average time spent on EBook Central's platform increased by 20.90% from 2.46 to 2.98 minutes, ranking second of nine platforms.

Gale Virtual Reference Library (GVRL)

GVRL had its highest Overall Success Rate of 100% on Task 5, based on 50% ESR and 50% ASR. GVRL saw the most frequent Failures on Task 7, in which the platform produced a 30% FR versus a 70% ESR. For complete data on GVRL's success and failure rates, see table 4.

GVRL achieved its best average time on Task 6, for which it ranked in second place with just 12.16 seconds compared to 21.17 seconds for all others. GVRL's worst average time, earning eighth place on Task 4, was 23.73 seconds versus 17.17 seconds for all platforms.

GVRL did not have a next-page feature at the time of testing and incurred 15 null values in total. When adjusted to account for null values, GVRL's overall average time increased by 5.89% from 3.76 to 3.98 minutes, ranking fourth of all nine platforms.

Oxford Reference

Oxford Reference achieved 100% OSR on Task 2 and Task 5. Oxford Reference's worst performance occurred in Task 6, with a majority (55.6%) Failure Rate. For complete data on Oxford Reference's success and failure rates, see table 5.

Oxford Reference did not manage any first place rankings

for average tasks times, but it did rank in the top half of platforms for Task 8 and Task 5. The platform earned last place on Task 4 and Task 7.

Oxford Reference did not have a next-page feature at the time of testing and incurred 15 null values in total. When adjusted to account for null values, Oxford Reference's overall average time increased by 4.60% from 5.26 to 5.50 minutes, ranking eighth of all nine platforms.

Safari

Safari achieved 100% OSR, as well as 100% ESR, on all tasks except Task 5. For complete data on Safari's success and failure rates, see table 6.

When comparing average completion times, Safari ranked in first place among all platforms on Task 2 and Task 8. Safari's struggled most on Task 5, with the second-slowest average completion time.

Safari did not have a citation feature or a note feature at the time of testing and incurred 22 null values in total. When adjusted to account for null values, the overall average time increased by 46.75% from 1.83 to 2.68 minutes. This platform experienced the largest percentage change when accounting for null values, but ultimately maintained a topplace ranking overall.

IGI Global

IGI Global achieved 100% OSR, as well as 100% ESR, on Tasks 1, 3, 4, and 6. IGI Global's highest FR occurred in Task 5, with nearly a third (30%) of its users failing to complete the task. For complete data on IGI Global's success and

| Oxford | Rank by Avg Task Time | Avg Task Time (sec) | ALL Avg Task T ime (sec) | Oxford ESR % | ALL platforms ESR % | Oxford ASR % | ALL platforms ASR % | Oxford OSR % | ALL platforms OSR % | Oxford FR % | ALL platforms FR % |
|--------|-----------------------------|------------------------|--|--------------|------------------------|-----------------|------------------------|--------------|-------------------------------|-------------|-----------------------|
| Task 1 | 8 th of 9 | 106.48 | 55. <i>92</i> | 70 | 82.1 | 10 | 6.6 | 80 | 88.7 | 20 | 11.3 |
| Task 2 | 7 th of 9 | 71.81 | 62.58 | 70 | 65.1 | 30 | 23.6 | 100 | 88.7 | - | 11.3 |
| Task 3 | - | - | - | - | 96.1 | - | 1.3 | - | 97.4 | - | 2.6 |
| Task 4 | 9 th of 9 | 25.89 | 17.18 | 71.4 | 91 | - | 5.6 | 71.4 | 96.6 | 28.6 | 3.4 |
| Task 5 | 3 rd of 9 | 22.43 | 35.6 | 80 | 82.4 | 20 | 7.4 | 100 | 89.8 | - | 10.2 |
| Task 6 | 7 th of 7 | 36.33 | 21.17 | 44.4 | 81.1 | - | 0 | 44.4 | 81.1 | 55.6 | 18.9 |
| Task 7 | 4 th of 4 | 47.3 | 29.98 | 77.8 | 89.5 | - | 1.8 | 77.8 | 91.2 | 22.2 | 8.8 |
| Task 8 | 2 nd of 9 | 15.07 | 27.2 | 90 | 89.4 | - | 0 | 90 | 89.4 | 10 | 10.6 |
| TOTAL | 8 th of 9 | 5.5 min | 4.2 min | | | | | | | | |

Table 5. Oxford Reference Performance Compared to All-Platform Averages

Table 6. Safari Performance Compared to All-Platform Averages

| Safari | | Avg Task Time (sec) | ALL Avg Task Time (sec) | Safari ESR % | ALL platforms ESR % | Safari ASR % | ALL platforms ASR % | Safari OSR % | ALL platforms OSR % | Safari FR % | ALL platforms FR % |
|--------|-------------------------|------------------------|--------------------------------------|--------------|------------------------|--------------|------------------------|--------------|--------------------------------------|-------------|-----------------------|
| Task 1 | 2 nd of 9 | 25.06 | 55.92 | 100 | 82.1 | - | 6.6 | 100 | 88.7 | - | 11.3 |
| Task 2 | 1 st of 9 | 9.03 | 62.58 | 100 | 65.1 | - | 23.6 | 100 | 88.7 | - | 11.3 |
| Task 3 | 4 th of 7 | 4.64 | 4.57 | 100 | 96.1 | - | 1.3 | 100 | 97.4 | - | 2.6 |
| Task 4 | 3 rd of 9 | 12.87 | 17.18 | 100 | 91 | - | 5.6 | 100 | 96.6 | - | 3.4 |
| Task 5 | 8 th of 9 | 48.04 | 35.6 | 90 | 82.4 | - | 7.4 | 90 | 89.8 | 10 | 10.2 |
| Task 6 | - | - | - | - | - | - | - | - | - | - | - |
| Task 7 | - | - | - | - | - | - | - | - | - | - | - |
| Task 8 | 1 st of 9 | 14.26 | 27.2 | 100 | 89.4 | - | - | 100 | 89.4 | - | 10.6 |
| TOTAL | 1 st of 9 | 2.68 min | 4.2 min | | | | | | | | |

failure rates, see table 7.

IGI Global achieved first place completion times on Task 4 and Task 6, but produced last-place completion times on Task 2 and Task 5. Due to IGI Global not offering a note-taking feature at the time of testing, Task 7 was null.

Despite IGI Global tying for the most first-place completion times (2), it also produced the slowest completion times for two tasks. The platform did not have a citation feature at the time of testing, and incurred 16 null values in total. When adjusted to account for null values, IGI Global's overall average time increased by 13.10% from 4.00 to 4.52 minutes, earning the platform a seventh place ranking among all nine platforms.

| IGI | Avg Task Time | Avg Task Time (sec) | ALL Avg Task Time (sec) | IGI ESR % | ALL platforms ESR % | IGI ASR % | ALL platforms ASR % | IGI OSR % | ALL platforms OSR % | IGI FR % | ALL platforms FR % |
|--------|-------------------------|------------------------|--------------------------------------|-----------|------------------------|-----------|------------------------|-----------|--------------------------------------|----------|-----------------------|
| Task 1 | 5 th of 9 | 38.69 | 55.92 | 100 | 82.1 | - | 6.6 | 100 | 88.7 | - | 11.3 |
| Task 2 | 9 th of 9 | 94.07 | 62.58 | 40 | 65.1 | 40 | 23.6 | 80 | 88.7 | 20 | 11.3 |
| Task 3 | 5 th of 7 | 4.77 | 4.57 | 100 | 96.1 | - | 1.3 | 100 | 97.4 | - | 2.6 |
| Task 4 | 1 st of 9 | 8.22 | 17.18 | 100 | 91 | - | 5.6 | 100 | 96.6 | - | 3.4 |
| Task 5 | 9 th of 9 | 65.61 | 35.6 | 60 | 82.4 | 10 | 7.4 | 70 | 89.8 | 30 | 10.2 |
| Task 6 | 1 st of 7 | 10.2 | 21.17 | 100 | 81.1 | - | 0 | 100 | 81.1 | - | 18.9 |
| Task 7 | - | - | - | - | - | - | - | - | - | - | - |
| Task 8 | 6 th of 9 | 23.49 | 27.2 | 80 | 89.4 | - | - | 80 | 89.4 | 20 | 10.6 |
| TOTAL | 7 th of 9 | 4.52 min | 4.2 min | | | | | | | | |

Table 7. IGI Global Performance Compared to All-Platform Averages

CRCnetBASE

CRCnetBASE produced an OSR of 100% on Tasks 1, 3, and 4; for complete data on CRCnetBASE's success and failure rates, see table 8.

On completion times, CRCnetBASE ranked among the lower performers on Task 1 and Task 2, while it scored as the worst performer on Task 8. Only Task 5 was scored in the top three platforms. Task 7 was null, as this feature was not offered on the platform at the time of testing.

Only on Task 5 did CRCnetBASE rank in the top half of platforms for average completion times. CRCnetBASE came in dead last at ninth place on Task 8 with 57.57 seconds—the average across all platforms was 27.2 seconds, and the platform that took first place on this task averaged just 14.26 seconds.

Although CRCnetBASE generated an OSR of 90% or better in all tasks, the platform fell into the bottom third in completion times for all but one task. After adjusting to account for the platform's 13 null values, the overall average time decreased from 4.01 to 4.53 minutes, putting this platform in the lower middle (sixth) among all nine platforms.

Springer Link

Springer Link produced its highest OSR on Tasks 1 and 4, and its worst usability in Task 2, with a substantial 70% FR. For complete data on Springer Link's success and failure rates, see table 9.

With respect to the average task completion time, Springer Link was highly competitive on Task 1 and Task 3, but ranked in the bottom half of platforms on Task 4, Task 5, and Task 2. Because Springer Link did not offer note or citation tools at the time of testing, Tasks 6 and 7 were null.

Despite landing in the top quartile of completion times for two tasks, Springer Link fell into the low middle rankings for all others. For Task 2, Springer Link produced the second-worst FR percentage for any task among all platforms. The platform did not have a full book citation feature or a note feature at the time of testing and incurred 21 null values in total. When adjusted to account for null values, the overall average time increased by 27.06% from 3.21 to 4.08 minutes, thereby moving the platform down from fourth to fifth place among all nine platforms.

JSTOR

JSTOR achieved 100% OSR on Tasks 2, 3 and 4. JSTOR's highest FR occurred in Task 1 (80%). For complete data on JSTOR's success and failure rates, see table 10.

When comparing average task completion times, JSTOR produced a first-place ranking amongst all platforms on Task 3 and a second-place ranking for Task 4, although both tasks produced relatively small completion times overall. Conversely, JSTOR also produced the second-slowest completion time on Task 8 and the slowest for Task 1, which is almost 3 times the overall average. Due to JSTOR not offering a note-taking feature at the time of testing, Task 7 was null.

In addition to generating the most Failure Rates of \geq 30% (three tasks), JSTOR's Task 1 FR of 80% came in as the worst FR for any task among all platforms. Furthermore, outside of placing first (Task 3) and second (Task 4), the platform did not manage to place higher than sixth for average completion time rankings on any other task. The platform did not

| CRC | Rank by Avg Task Time | Avg Task Time (sec) | ALL Avg Task Time (sec) | CRC ESR % | ALL platforms ESR % | CRC ASR % | ALL platforms ASR % | CRC OSR % | ALL platforms OSR % | CRC FR % | ALL platforms FR % |
|--------|-----------------------------|------------------------|--------------------------------------|-----------|------------------------|-----------|------------------------|-----------|--------------------------------------|----------|-----------------------|
| Task 1 | 7 th of 9 | 47.54 | 55.92 | 80 | 82.1 | 20 | 6.6 | 100 | 88.7 | 0 | 11.3 |
| Task 2 | 5 th of 9 | 70.01 | 62.58 | 70 | 65.1 | 20 | 23.6 | 90 | 88.7 | 10 | 11.3 |
| Task 3 | 6 th of 7 | 4.77 | 4.57 | 100 | 96.1 | - | 1.3 | 100 | 97.4 | 0 | 2.6 |
| Task 4 | 5 th of 9 | 16.7 | 17.18 | 100 | 91 | - | 5.6 | 100 | 96.6 | 0 | 3.4 |
| Task 5 | 2 nd of 9 | 21.7 | 35.6 | 90 | 82.4 | - | 7.4 | 90 | 89.8 | 10 | 10.2 |
| Task 6 | 5 th of 7 | 25.03 | 21.17 | 90 | 81.1 | - | 0 | 90 | 81.1 | 10 | 18.9 |
| Task 7 | - | - | - | - | - | - | - | - | - | - | - |
| Task 8 | 9 th of 9 | 57.57 | 27.2 | 90 | 89.4 | - | 0 | 90 | 89.4 | 10 | 10.6 |
| TOTAL | 6 th of 9 | 4.49 min | 4.2 min | | | | | | | | |

Table 8. CRCnetBASE Performance Compared to All-Platform Averages

| Table 9. Springer Li | nk Performance | Compared to | All-Platform Averages |
|----------------------|----------------|-------------|-----------------------|
| | | | |

| Springer | Rank by Avg Task Time | Avg Task Time (sec) | ALL Avg Task Time (sec) | Springer ESR % | ALL platforms ESR % | Springer ASR % | ALL platforms ASR % | Springer OSR % | ALL platforms OSR % | Springer FR % | ALL platforms FR % |
|----------|-----------------------------|------------------------|--------------------------------------|----------------|------------------------|-------------------|------------------------|-------------------|--------------------------------------|---------------|-----------------------|
| Task 1 | 1 st of 9 | 19.77 | 55.92 | 100 | 82.1 | 0 | 6.6 | 100 | 88.7 | 0 | 11.3 |
| Task 2 | 8 th of 9 | 83.36 | 62.58 | 20 | 65.1 | 10 | 23.6 | 30 | 88.7 | 70 | 11.3 |
| Task 3 | 2 nd of 7 | 4.28 | 4.57 | 75 | 96.1 | 0 | 1.3 | 75 | 97.4 | 25 | 2.6 |
| Task 4 | 6 th of 9 | 19.99 | 17.18 | 55.6 | 91 | 44.4 | 5.6 | 100 | 96.6 | 0 | 3.4 |
| Task 5 | 7 th of 9 | 47.42 | 35.6 | 70 | 82.4 | 0 | 7.4 | 70 | 89.8 | 30 | 10.2 |
| Task 6 | - | - | - | - | - | - | - | - | - | - | - |
| Task 7 | - | - | - | - | - | - | - | - | - | - | - |
| Task 8 | 5 th of 9 | 23.11 | 27.2 | 88.9 | 89.4 | 0 | 0 | 88.9 | 89.4 | 11.1 | 10.6 |
| TOTAL | 5 th of 9 | 4.08 min | 4.2 min | | | | | | | | |

have a note feature at the time of testing and incurred 11 null values in total. When adjusted to account for null values, the overall average time increased by 9.07% from 5.89 to 6.43 minutes, ranking last.

Follow-Up Questions

Following each test, the participant responded to follow-up questions regarding which platform they liked most and least, their past experience with the platforms tested, and their expectations regarding likely future use. Table 11 summarizes the key quantitative results; the Discussion section

| JSTOR | Avg Task Time | Avg Task Time (sec) | ALL Avg Task Time (sec) | JSTOR ESR % | ALL platforms ESR % | JSTOR ASR % | ALL platforms ASR % | JSTOR OSR % | ALL platforms OSR % | JSTOR FR % | ALL platforms FR % |
|--------|-------------------------|------------------------|--------------------------------------|-------------|------------------------|-------------|------------------------|-------------|--------------------------------------|------------|-----------------------|
| Task 1 | 9 th of 9 | 166.79 | 55.92 | 20 | 82.1 | 0 | 6.6 | 20 | 88.7 | 80 | 11.3 |
| Task 2 | 6 th of 9 | 71.58 | 62.58 | 89 | 65.1 | 11.1 | 23.6 | 100 | 88.7 | 0 | 11.3 |
| Task 3 | 1 st of 7 | 3.45 | 4.57 | 100 | 96.1 | 0 | 1.3 | 100 | 97.4 | 0 | 2.6 |
| Task 4 | 2 nd of 9 | 12.5 | 17.18 | 100 | 91 | 0 | 5.6 | 100 | 96.6 | 0 | 3.4 |
| Task 5 | 6 th of 9 | 38.07 | 35.6 | 70 | 82.4 | 0 | 7.4 | 70 | 89.8 | 30 | 10.2 |
| Task 6 | 6 th of 7 | 26.25 | 21.17 | 90 | 81.1 | 0 | 0 | 90 | 81.1 | 10 | 18.9 |
| Task 7 | - | - | - | - | 89.5 | - | 1.8 | - | 91.2 | - | 8.8 |
| Task 8 | 8 th of 9 | 41.02 | 27.2 | 70 | 89.4 | 0 | 0 | 70 | 89.4 | 30 | 10.6 |
| TOTAL | 9 th of 9 | 6.43 min | 4.2 min | | | | | | | | |

Table 10. JSTOR Performance Compared to All-Platform Averages

more fully addresses qualitative data from participant comments.

DISCUSSION

Table 12 lists the shorthand phrases that will be used in this section to refer to testing tasks.

EBSCO eBooks

Despite being unable to generate a top completion time in any task, EBSCO eBooks produced 100% ESR for three tasks (Next Page, Next Chapter/Entry, and Search Term), and only on one task did it produce an ESR below 90% (Task 2, Go To Page 50). When asked to navigate to page 50 of a selected e-book, more than 40% of participants elected to scroll through the e-book's pages instead of taking advantage of the platform's direct page navigation feature. Although this result did generate a higher ASR than any other platform on this task, the difference between the average completion times for Efficient Success and Alternate Success methods was only four seconds. This demonstrated to the researchers that while EBSCO eBooks' direct page navigation tool may have not been easily noticed, the platform was able to compensate for this by providing a layout that participants were able to navigate relatively easily. Additionally, on Task 7 (Notes Tool), EBSCO eBooks generated a 100% Overall Success Rate, and of the 20 participants tested for this task, only one was unable to produce an Efficient Success. The researchers found EBSCO eBooks' resounding success in this area particularly surprising when compared to the

study by Tovstiadi, Wiersma, and Tingle, in which less than 25% of testers were able to locate the notes tool within the platform.23

This ease of navigation did not always translate into top-ranking completion times, however, as EBSCO eBooks produced times for Next Page and Find Another E-Book tasks which ranked in the bottom-third among all platforms. Additionally, despite high success rates overall, some participants occasionally had difficulty completing certain other tasks on the platform. For example, when attempting to perform a search within the book (Task 5), one participant commented, "I don't immediately see a search button," and another commented, "That was a little hard to find." EBSCO eBooks excelled at conveying when an e-book was in use (95% ESR; see figure 1). The researchers believe this capability is increasingly important as platforms and acquisitions methods proliferate, forcing patrons to interpret limited concurrent access to some electronic resources.

In post-testing follow up questions, all participants were asked to select the platform they preferred most and least from the sample of platforms included in their particular testing session. Since not all platforms were tested an equal number of times (e.g., aggregator platforms were tested 20 times each, with all other platforms being tested 10 times each), the discussion of post-testing results for all platforms henceforth use percentages calculated from the number of participants who actually tested the platform. For example, if a participant did not test a particular platform and consequently did not select that platform as their favorite platform, it would not count against the platform as a nonselection, nor would it be reflected in the reported percentage of selections that platform earned within the category

 Table 12. Shorthand Phrases to Represent Testing Tasks

| | Most Preferred (Votes) | Most Preferred (%)* | Ranking | Least Preferred (Votes) | Least Preferred (%)* | Ranking |
|------------------|---------------------------|------------------------|---------|----------------------------|-------------------------|---------|
| eBook Central | 11 | 55 | 1 | 1 | 5 | 1 t |
| GVRL | 4 | 40 | 2 | 1 | 10 | 2 t |
| EBSCO eBooks | 7 | 35 | 3 | 1 | 5 | 1 t |
| Safari | 3 | 30 | 4 | 4 | 40 | 3 t |
| Oxford Reference | 2 | 20 | 5 t | 1 | 10 | 2 t |
| IGI Global | 2 | 20 | 5 t | 4 | 40 | 3 t |
| JSTOR | 2 | 20 | 5 t | 6 | 60 | 4 |
| Springer Link | 1 | 10 | 6 | 4 | 40 | 3 t |
| CRCnetBASE | 0 | 0 | 7 | 8 | 80 | 5 |

* Due to the variance in total number of tests conducted for each platform, the researchers elected to rank platform preference by percentage of vote type, and not by total number of votes received for each category

| Table 12. Shorthand I mases to Represent resting lasks | |
|--|---------------------|
| Task | Shorthand |
| Task 1, Find specified e-book title | Find E-Book |
| Task 2, Navigate to Page 50 | Go To Page 50 |
| Task 3, Go to the Next Page | Next Page |
| Task 4, Go to the Next Chapter | Next Chapter/Entry |
| Task 5, Search for provided term within the e-book | Search Term |
| Task 6, Find a citation for the e-book | Citation Tool |
| Task 7, Save a Note in this e-book | Note Tool |
| Task 8, Find another e-book title | Find Another E-Book |
| Task 9, Turnaway message meaning | Turnaway |

of favorite platform. Participants selected EBSCO eBooks as their favorite platform seven times (35%, third place). Comments in favor of the platform included, "Simple! Had everything I was looking for right there," and, "It had easy and very specific navigation. [Using] words, instead of symbols, made it superior to [EBook Central]." Participants chose the platform as their least preferred e-book platform only once (5%, tied for first place); however, when this participant was asked to elaborate on what they did not like about the platform, one of the details mentioned was the lack of a citation tool. This led the researchers to believe that this tester may have confused EBSCO eBooks with another platform that did not offer this particular feature.

EBook Central

While Task 9 was only tested by the two aggregator platforms and was not timed, EBook Central's Failure Rate of 44.4% for this task was almost 9 times higher than the competing platform (5%). Nonetheless, EBook Central generated 100% ESR in more than half of all tasks, and produced a top-ranked completion time on one task (Task 7; *Note Tool*). EBook Central tied for the most ESR scores, with 100% rates on Task 1 (*Find E-Book*), Task 3 (*Next Page*), Task 5 (*Search Term*), Task 7, and Task 8 (*Find Another E-Book*). Additionally, EBook Central was one of only two platforms to generate a 100% OSR on Task 7.

On average, EBook Central participants successfully searched terms within the specified e-book 31.3% faster than the average produced across all other platforms. However, on at least seven occasions, participants expressed difficulty navigating the results of those searches; the results, which were displayed via bars demonstrating the count of the searched term in each chapter, obscured the actual matched text until clicked upon (see figure 1). One tester asked, "*Is it supposed to highlight it when I search?*," and another stated, "*This doesn't make any sense. What I'm used to is it popping up the specific [results], not all this extra information.*" The majority of the patrons who experienced uncertainty with the search term results did eventually decipher the structure, but several ultimately moved on without indicating understanding of the arrangement.

Additionally, EBook Central participants were able to search and locate specified e-books 52% faster than the

Where's the EASY Button?

average time across all other platforms, and were able to locate the note tool 34.43% faster than the second highest ranked platform (EBSCO) on average. Participants praised the visibility of the note tool with comments such as, "*This* one gives you a highlighter, a notes box, and a bookmark. I like that," and "It's pretty easy to tell because it's a little empty page, and it's right next to the highlighter [icon]." This intuitiveness may in part have contributed to the platform's top completion time.

EBook Central generated very few failed tasks overall, but the citation tool task (Task 6) produced the platform's highest number of failures (3 total) and lowest OSR (83.3%), contributing to the average task time ranking of fourth out of 7. Most of the issues EBook Central experienced with this task appeared to relate to the use of a quotation mark icon,

which participants did not notice or locate intuitively. Icons for citation tools on other platforms were accompanied by explanatory text, such as "Get Citation" or similar, which did not require hovering over the icon; this may have proved advantageous, since participants rarely hovered over the Ebook Central icon long enough for pop-up text to appear.

and Ebook Central

EBook Central tied for the fewest number of leastpreferred platform votes among all participants (1 vote, 5%), and took top ranking with 11 participants (55%) indicating it as their favorite platform. This mirrored its selection as the most preferred platform among those tested in the study by Tovstiadi, Wiersma, and Tingle.²⁴ Participant comments pertaining to the platform were predominately positive; however, the platform did garner several comments implying there may still exists room to improve certain areas. When expounding upon dislikes, one tester noted, "It has to do with it being too busy. It can almost [become] overwhelming with the amount of data that comes up on the screen." Other participants conveyed contrary sentiments, however, with one tester stating, "Everything was just so clear, and everything was where I thought it should be. All of the notes and citations were above [the text], and the search bar was really clear on the side." Among those testers who favored EBook Central, nearly all expressed being pleased with the platform's ease of navigation and intuitiveness.

Gale Virtual Reference Library (GVRL)

GVRL generated a completion time in the top quartile for only Task 6; most results were in the low middle of the average task time rankings. GVRL was one of only three platforms that failed to achieve a 100% Overall Success Rate for Task 1 (*Find E-Book*), tying for the second worst OSR with Oxford Reference. Despite GVRL generating only a 40%



GVRL was only able to achieve a 100% OSR on one of six tasks (Task 5-Search Term). When compared to the other platforms that generated a 100% OSR on this task, GVRL produced completion times that were 48.58% slower on average. One tester correctly located the search tool; however, even after locating it, she remained uncertain as to whether it was the correct location to generate a search. The platform's worst result may have been produced in Task 7 (Note Tool), where it produced a 30% Failure Rate (highest among all platforms), and a completion time that was nearly 20% slower than the average completion time (35.97 seconds versus 29.98). Several participants commented that the tool was unintuitive to use. One participant managed to find the notes tool, but was unable to figure out how to use it. Another participant was able to locate the tool, but was not certain whether her notes would be saved upon leaving the e-book.

Despite GVRL struggling on most tasks, four participants (40%) selected it as their favorite platform, making it the second most popular; only one participant (10%, tied for second) selected it as their least favorite. The researchers' notes regarding these selections included participant comments favoring the platform's presentation of search results, ease of navigation, and visibility of its tools.



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Figure 2. EBook Central Search Term (Task 5) results

Oxford Reference

Although Oxford Reference ranked in the bottom third for completion times on many tasks—bringing in the lowest ranking on two of seven tasks—it achieved second place on Task 8, demonstrating successful usability in open searching that was perhaps not seen in known-item searching (Tasks 1 and 5) or navigating within an e-book (Tasks 1, 2, 3, and 4).

The researchers believe Oxford Reference's higher success rate in Task 8 (*Find Another E-Book*) had much to do with its engaging landing page, which made identifying new e-books a more intuitive process for participants. Conversely, Oxford Reference's poor performance on other tasks highlighted a disconnect between form and function. Several participants commented on Oxford Reference's welcoming aesthetics the start of testing sessions; however, many participants experienced difficulty and confusion when completing tasks such as navigating to the next chapter of an e-book (Task 4) or locating the citation tool (Task 6). The researchers observed that the platform failed to translate its approachable design into a user-friendly experience. This was most apparent from the average task completion times for Task 4. While all other platforms averaged 17.18 seconds to complete navigating to the Next Entry, Oxford Reference testers took over 44% longer (24.91 seconds).

Not only did Oxford Reference generate the slowest completion time for Task 4, but it also generated the lowest Overall Success Rate (71.4%), and highest Failure Rate (28.6%). Similar issues were observed on Task 6 (Citation Tool) and Task 7 (Note Tool), where Oxford Reference completion times were 71.6% and 57.8% slower than the average completion times. For both of these tasks, Oxford Reference produced the second highest Failure Rate, as well as the lowest OSR for Task 6 and the second lowest OSR for Task 7. Oxford Reference's struggle with the citation tool contrasted with the success of the citation tools on many other platforms, not only in the present study but also in the study by Tovstiadi, Wiersma, and Tingle, which found that most students (more than 50%) "found citation tools easily."25 Oxford Reference produced better OSR on other tasks, such as Task 5 (100%), and Task 1 (80%), but struggled with a poor average completion time in the initial task of finding the specified E-Book (106.48 seconds vs. 49.87 for all platforms, or 90% longer), which could have given participants a frustrating first impression.

Despite Oxford Reference's overall below-average performance, the platform generated only one vote for least favorite platform (10%, tied for second place). However, it also earned only two votes for most favorite platform (20%, tied for fifth place). Of those participants who favored the platform, one indicated preferring the platform due to "knowing how to do everything on it," while another tester expressed opposite feelings, stating, "I would probably kick [Oxford Reference] to the curb, which is interesting because most of Oxford's stuff I usually like."

Safari

Safari took the top completion time in two tasks (*Go To Page 50* and *Find Another E-Book*), earned second place on Task 1 (*Find E-Book*), and third place for Task 4 (*Next Chapter/Entry*), but only generated an eighth place finish on Task 5 (*Search Term*). At the time of testing, only six of the eight tasks could be tested on the Safari platform; thus, the results included a fairly high number of null values (22 total) due to the lack of testable features.

Safari tied for the most 100% Efficient Success Rates (Tasks 1–4, and 8), and produced 90% ESR ratings for the remaining task (Task 5). Impressive to the researchers, Safari was the only platform to have only one task (Task 5; 10%) generate any failures. In contrast, IGI Global, EBSCO eBooks, and EBook Central all had three tasks generate at least one failure.

Safari demonstrated easy navigation by finishing in the top third for four of the five tasks measuring this aspect (Tasks 1, 2, 4, 8). While many testing participants seemed to easily navigate within the embedded e-book, both by sections as well as by the table of contents on the left menu, participants noted that the platform did not provide page numbers, providing comments such as, "I feel like even when you're reading digitally, you should have page numbers."

Safari was mostly strong in known-item searches (Tasks 1, 5, 8), with top-quartile rankings in Task 1 and Task 8, but produced its lowest ranking (eighth) on Task 5 (Search Term). Several users struggled to initially identify how to search within the e-book as demonstrated by the significantly longer time (48.04 seconds, more than double the average task time of the top four platforms, 22.07). Additional evidence supporting the difficulty with Task 5 includes testing participants' comments, such as, "I don't like having to expand the drop down to find the search within feature," as well as anecdotal testing notes from researchers about participants attempting to find the search box and trying to use Ctrl+F due to the non-intuitive location of this tool. For the available two of five tasks measuring Tools/Features (Tasks 3 and 4), Safari produced 100% ESR ratings, but generated mixed results on completion time rankings with a sixth of 7 finish on Task 3, and a third of nine ranking on Task 4.

Garnering the fastest (first) overall average completion time among all platforms didn't necessarily translate into being a preferred platform, however, as Safari was selected the least preferred platform four times (40%, tied for third), and was chosen as the favorite platform only three times (30%, fourth). Despite high success rates overall, missing tools, particularly the citation tool, appeared to have influenced tester's perception of the platform. Two such supporting statements included, "[I] don't see that [citation tool]. Again would just use bibliographic information and create my own citation", and "[I] looked at copyright where I thought it would be so going to say "no" this book doesn't offer citations."

IGI Global

In addition to having the fastest average completion time for two tasks (Task 4 and 6), IGI Global also produced a 100% Efficient Success Rate for those same tasks (*Next Chapter/ Entry* and *Citation Tool*).

The platform produced last place rankings (ninth) for two tasks--Go To Page 50 (Task 2) and Search Term (Task 5). Failure Rates of 20% and 30% for Tasks 2 and 5 provided additional evidence of this platform's usability challenges. When asked to navigate to page 50 of a selected e-book, more than 40% of participants elected to scroll through the e-book's pages (Alternate Success) instead of taking advantage of the platform's direct page navigation (Efficient Success). Although this result did generate the second highest ASR for this task, the difference between the average completion times for Efficient Success and Alternate Success methods was only 10 seconds. While the direct page navigation was not intuitive to testing participants, IGI Global's two reading options (PDF and HTML) allowed participants to navigate relatively easily despite the lack of page numbers in the HTML version.

For the remaining tasks that focused on locating an e-book on the platform (Tasks 1 and 8), IGI Global produced

fifth and sixth place rankings respectively. The researchers noted that for Task 8's failures, participants understood how to search correctly, but could not distinguish books within the results from chapters or e-journals.

IGI Global demonstrated mixed ease of navigation by finishing first for one of the five tasks measuring this (Task 4), but finished in the bottom third for Task 2 (ninth) and Task 8 (sixth). While the platform offered both HTML and PDF versions of the tested e-book, it did not provide page numbers in the HTML version, an oversight that had several participants swapping between the two formats trying to identify page numbers, as evidenced by comments like, "*I don't see page numbers so...* But I know I'm [in] chapter three."

IGI Global struggled with known-search features, with completion time rankings of fifth, ninth and sixth place respectively for Tasks 1, 5, and 8. The platform's performance with Task 5 (Search Term) appeared particularly problematic, as demonstrated not only by earning the lowest rank on this task, but also by producing a 30% Failure Rate. Additionally, significantly longer average completion times (65.61 seconds, more than three times the average of the top four platforms, 22.07) appeared to validate testers' struggles with identifying how to search within the e-book on this platform. Participants' comments, and researchers' observations regarding participants struggles with locating the search tool, and unsuccessfully using Ctrl+F, further give weight to the prevalence of this issue. When attempting to search within the book, participants' comments included: "I don't immediately see a search button," and, "Where's the search box? I'm not really sure where the search box is . . . [pause]. I wonder if Ctrl-F works? I'm going to try Ctrl-F.... And it didn't work." The success (or lack thereof) of participants' use of Ctrl+F to search the e-book depended on the existence of the provided search term in the chapter they had opened (PDF). Thus, an incorrect conclusion could easily be drawn if the participant was not using the intended search box tool (located on the e-book's main detail page) to search the entire resource.

For the available three of five tasks evaluating tools or features (Tasks 3, 4, and 6), IGI Global performed excellently, as indicated by its top (first) average completion times for Tasks 4 and 6, combined with 100% ESR for all three of these tasks.

Despite having two top completion times and high success rates overall, participants had difficulty navigating due to the lack of page numbers and finding the platform's search feature; some testing participants also noted the lack of a note tool. These challenges were corroborated by the platform's overall average completion time ranking of seventh place. In post-testing follow-up questions, participants chose IGI Global as their least preferred e-book platform 4 times (40%, tied for third), compared to their favorite platform 2 times (20%, tied for fifth place).

CRCnetBASE

CRCnetBASE did not manage to produce a top completion time on any task. However, the platform did produce

a 100% Efficient Success Rate on two tasks (Tasks 3 and 4), as well as 90% ESR for Tasks 5, 6 and 8. Those three tasks, in addition to Task 2, all experienced a 10% Failure Rate. Additionally, the platform produced a 90% OSR or higher on all seven tasks.

The CRCnetBASE platform performed poorly on the five tasks evaluating navigation, placing in lower half (fifth or lower) on all tasks measuring this aspect. The platform produced fifth place rankings on Tasks 2, 3, and 4; and garnered rankings of seventh and ninth (last) on Tasks 1 and 8 respectively. Participants made several comments about the e-book chapter and title tabs layout (see figure 2), such as:

- "So this one defaults to chapters . . . you have to switch it over to get the title."
- "I don't think that's an e-book; I think it searched wrong."
- "I feel like that should be switched where you have book titles come up first rather than book chapters."

This feedback, along with IGI Global's seventh and ninth place rankings for Task 1 and Task 8, respectively, demonstrates that the presentation of e-books on this platform was challenging for many users.

When attempting to navigate to page 50 (Task 2), testers did not always notice the page number ranges indicated by chapter within the table of contents, which led many testers to open various chapters and then return to the book's main page to try again. Researchers' observational notes indicate several instances where participants switched between chapters. Other evidence supporting this comes from participant feedback, such as "*it would be nice to do some pages, if not all.*" Book page numbers did not always match PDF page numbers when participants endeavored to use the "Go To Page" function (see figure 3), corroborated by comments such as, "*I'll just type it in up here. . . . No, wait, you can't do that, because it doesn't give you the actual page numbers.*"

For tasks measuring known searches, CRCnetBASE had mixed ratings, placing in the bottom half for two of the three tasks in this subset. Task 5 was CRCnetBASE's best ranking for any task at second place, followed by seventh and ninth (last) place for Tasks 1 and 8, respectively. CRCnetBASE's *Search Term* (Task 5) tool was intuitive and easily found by users, whereas the layout of different tabs for e-book titles versus e-book chapters again made finding a specific title (Task 1) or identifying another e-book (Task 8) tricky.

In all tasks evaluating tools and features for this platform (Tasks 3, 4 and 6), CRCnetBASE placed fifth. Task 6 (*Citation Tool*) proved problematic for some users, since this platform did not display any citation text directly, instead requiring users to download citations in .RIS format and then upload into third-party citation management software (RefWorks, EndNote, etc.). Participants provided feedback on this, saying:

You say Download Citations, and it says please check at least one article. These aren't articles, these are chapters,



Figure 3. CRCnetBASE display of e-book titles versus chapters (tab layout)



Figure 4. CRCnetBASE PDF Go-to-Page function

and it's in a book. [Downloaded a chapter citation and tried to view the RIS file; see figure 4.] I can't use it. That's fine. I don't even know what kind of citation it's gonna come up with. I don't know if it's gonna have a host of different citations or if it's, I don't know, the basic information that you would use to create citations.

During follow-up questions post-testing, CRCnetBASE was not selected by any participants as their favorite platform, and correspondingly received the greatest number of votes (8, 80%) as the least preferred.

Springer Link

Springer Link produced a 100% Efficient Success Rate for one task (Task 1), but in only one other task did it produce an ESR above 75% (Task 8). Additionally it struggled to produce OSR above 75% for three of the six tasks available on the platform (Tasks 1, 4, and 8).

At the time of testing, the Springer Link platform offered



Figure 5. CRCnetBASE citation tool



Figure 6. Springer Link Citation Tool



Figure 7. Springer Link's Book Metrics Feature

a PDF download option—by chapter, or entire book—and an HTML option for chapters; the full book PDF download was available for some, but not all, titles. This meant that testers had to choose whether to open a PDF or HTML version of the chapter, or download the full book PDF, which led to varying degrees of success for the tasks tested in this research project.

When the researchers evaluated the platforms during conceptualization of this research project, Springer Link did not seem to offer any sort of citation tool, so the rubric scored Task #6 as null.²⁶ However, when analyzing the screen-captured testing videos, the researchers did find a single instance that revealed the feature was available (see figure 5). The feature was so obscured that neither testers, nor the researchers during preparation, discovered the tool. Users had to be in the full book PDF (not a chapter PDF) to find it. The researchers maintained the null scoring, but the lack of intuitiveness in this feature seemed worth mentioning as a failure on the part of the platform.

Several participants mistakenly believed that Springer Link's Book Metrics/Bookmetrix feature was a citation tool, whereas its actual purpose is to show how often a book is cited elsewhere (see figures 6 and 7). Thus Task 6 was 70% Null, with the three fails (30%) due to incorrectly concluding Bookmetrix was a citation tool.

Participants struggled with navigation in Springer Link, as demonstrated by eighth and sixth place rankings for Tasks 2 and 4, respectively, but fared better on Tasks 1 (first) and 3 (second). E-Books were clearly displayed, which made it easy for testers to find the initial title (Task 1) as well as find another e-book on the platform (Task 8). However, Go to Page 50 (Task 2) saw a high Failure Rate (70%) due to only the PDF option having page numbers (HTML version did not), as well as e-book page numbers and PDF file page numbers not always coordinating. User comments such as "I don't see any numbers . . . like . . . okay well I know page 50 is somewhere in here . . . I just don't see it," and, "No side bar tool, I'm guessing this is the next chapter?" add weight to that perception. The researchers found tester's struggles with Springer Link's direct page navigation concerning when considering that it was the only platform in this study to generate a majority failure rate on this task. The platforms tested in the 2017 study by Tovstiadi, Wiersma, and Tingle also saw little difficulty in this area of functionality. That study reported that "few students" (less than 25%) "actually struggled to find the appropriate page."27 Additionally, the researchers anecdotally believe the high rate of intervention needed to assist participants with proceeding beyond Task 2 may have resulted in an unintended advantage in subsequent tasks. Nevertheless, problems similar to those seen in Task 2 were observed again on Task 4: when asked to navigate to the Next Chapter/Entry of the e-book, more than 44% of participants had an Alternate Success, which was by far the highest compared to any other platform for this task (the next highest ASR was 6.7%). This indicated to the researchers that Springer Link's PDF option by chapter or entire e-book might have not been a familiar option to testers.

Springer Link had mixed results with tasks demonstrating known searches (Tasks 1, 5, and 8) placing first, seventh and fifth, respectively. The higher rankings of Tasks 1 and 8 relative to Task 5 signal that the search tools available for discovering an e-book on the platform are intuitive but that searching within an e-book for a phrase or keyword was more obtuse. Participant actions that support this perspective include

- using Ctrl+F to search within the e-book;
- searching first within a chapter, and then having to exit and redo the search within the entire e-book; and
- searching the entire platform, rather than the e-book, for the search term.

One participant noted annoyance that search results only displayed which chapters contained the search term, but that further detail (highlighting the term, number of times

it appears, etc.) was not offered. As was the case with IGI Global, participants' success—or failure—using Ctrl+F to search the e-book was dependent upon if the chapter they had entered contained the provided search term. Thus, an incorrect conclusion could easily be drawn if the participant was not using the intended search box tool (located on the e-book's main detail page) to search the entire e-book.

Springer placed second on Task 3 even without offering any sort of specialized tool for moving between pages or chapters. As previously mentioned, the PDF option offered easy page navigation (Task 3) but did require jumping back to the book's main page to open the next chapter if the tester had not chosen to download the entire e-book. The note/comment tool was not offered on the Springer Link platform, and the citation tool was not believed to exist (see discussion above).

Collectively, these issues (bottom third rankings for *Go To Page 50*, *Next Chapter/Entry*, *Search Term; Citation Tool* hidden location compounded with confusing the Bookmetrix feature) may have translated into being chosen as the least favorite platform four times (40%, tied for third place), and only receiving one vote (10%, sixth place) for favorite platform.

JSTOR

JSTOR produced 100% Efficient Success Rates for two tasks (Task 3—*Next Page*; Task 4—*Next Chapter/Entry*), but otherwise proved to be consistently difficult for testers to use, placing in the bottom rankings for more than half of the eight tasks measured. When asked on the initial task to find a specified title, more than 80% of participants were not able to locate the e-book. The platform displaying e-book chapters more prominently than the e-book title—which was smaller, italicized, and lacking the subtitle (see figure 8)—may have contributed to this high (80%) Failure Rate.

The need for improvement in this area is further highlighted by participant comments after researchers revealed that the search results were chapters, characterized by, "*Oh*! *Now*, *if I had known that*..."

For navigation, the JSTOR platform offers thumbnails for page navigation to a specific page (see figure 9). Many testing participants did not notice this feature and opened a chapter, noted the page range, and then navigated using "*Next Page*" buttons. One tester corroborated that observation by stating, "*It would be nice to be able to just type in the page [number] where I want to go, so I'll just have to click the pages* [next page button]." The researchers believe the testers' oversight of direct page navigation may be due to thumbnails for navigating on e-book platforms being unique, thus not corresponding to participants' other experiences.

The Next Page and Next Chapter/Entry buttons were noted and appreciated by participants with feedback such as "So it says next chapter right there--this part of this site I like a lot." Both navigation tasks (3 and 4) were 100% Efficient Success and produced top or upper level rankings (first on Task 3; second on Task 4) relative to all other platforms.

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Figure 8. Detail of Bookmetrix Data in Springer Link

With regards to known searches, JSTOR produced lowrankings for the three tasks measuring this attribute, placing last (ninth) and second to last (eighth) for *Find E-Book* (Task 1) and *Find Another E-Book* (Task 8), respectively. Since both Task 1 and Task 8 dealt with finding and identifying e-book titles on the platform, this was a notable problem with JSTOR.

Tools and features seemed to be mostly intuitive for participants for the three tasks JSTOR had available. A first place finish for Task 3, followed by second and sixth for *Next Chapter* and *Citation Tool* tasks, respectively.

In post-testing follow up questions, JSTOR received six votes (60%, fourth place) for least preferred e-book platform, and received only two votes (20%, tied for fifth place) for favorite platform. The demonstrated struggle to find and identify e-book titles (Tasks 1 and 8) may have influenced these opinions, as feedback comments included, "*Harder to find the title of the book. It didn't have the actual title on the entry.* Seems a little less developed. Older design," and "Had a harder time navigating, takes longer to figure out."

LIMITATIONS AND FURTHER RESEARCH

The study encountered several limitations that are worth noting. The e-book selected for testing on the GVRL platform was a "featured" title, meaning that it was displayed on the homepage when a user entered the platform. This limited the extent to which participants actually had to *search* for the book versus merely *recognize* the book, so Task 1 performance may have been skewed in GVRL's favor. However, since Task 8 also tested the capability to search for books, the researchers feel that this usability theme was still fairly explored on this platform.

Rather than force users to overcome the additional hurdle of creating a new account, the researchers artificially handled individual user-account logins on some platforms. This was deemed necessary because the *Annotate* tool in Oxford Reference would not even be displayed on the screen, unless a user was logged in to the platform, so they would not even have the opportunity to identify the availability of the feature without a preceding login. Therefore, prior to each test, the researchers logged in to an individual account on



Figure 9. JSTOR e-book display of titles versus chapters



Figure 10. JSTOR Thumbnails Tab

several platforms, such as Oxford Reference, EBSCO eBooks, and GVRL. Although this simplified the testing procedure, the results may not accurately reflect user interactions with various tools when such intervention is not present. Further research in this area may especially be warranted when a platform provides a capability such as note-taking, but saves the data only for the duration of the current session unless a user logs in to an individual account, as is the case with EBSCO eBooks; it is unclear from the present study whether users would accurately understand the session-duration limitation of such tools.

While analyzing recorded test sessions, researchers realized that the testing procedure should have been better normed before tests began. Some test administrators read each task aloud to the participant, while other test administrators allowed the participant to read the tasks themselves. More consistent practices in this regard would have improved reliability of the testing method, and would have possibly translated into fewer skipped tasks resulting in null values. Additionally, as with any research conducted online, technology may not always cooperate. This study encountered several issues with account logins, system timeouts, Flash compatibility, slow load times, and other miscellaneous errors that resulted in null testing values.

Self-selection bias may have been a problem in participant recruitment, since those most motivated to respond to the invitation quickly—possibly representing those most interested in e-books—would have been chosen first for the limited number of participant slots. In terms of researcher "lessons learned," recruitment materials should have been more clear about all testing appointments being on campus, because several online students volunteered but were unable to attend live testing sessions in the library. If the researchers could devise an approach to include these volunteers in virtual testing in the future, it would be advantageous for their experience to also be represented. Another "lesson learned" was that efficiency would have been improved by scheduling testing appointments via a calendar tool such as LibCal, rather than via email back-and-forth.

Although the study's rubric permitted the researchers to bring a unique perspective to assessing platform usability, the rubric relies on certain assumptions about developer intent. Platform *Help* files were used as much as possible to determine developer intent, but nonetheless, the determination of what constitutes *Efficient* versus *Alternate* Success is still subjective to some degree. This may act as a limitation of the study, but it may also present a possible area for further research. E-Book usability research could benefit from the development of a more universal rubric of what constitutes ideal usability in e-book navigation, searching, and other key areas of functionality, informed by studies of user expectations and a broader base of research in user interface design.

Further research should delve deeper into testing turnaway experiences, which this study only briefly explored. Other advanced features, such as downloading and DRM issues, should also be examined through more rigorous user-based testing. Additionally, further research could investigate possible contradictions between user opinions and user behavior with regards to highlighting and notetaking tools. A number of users commented that they liked/ disliked a certain platform because it did/didn't offer notetaking, but the researchers wonder how many of those users would have noticed the presence or absence of such a tool outside of the testing scenario. Future studies could also explore how expressed opinions about the importance or appreciation of these tools map to actual user behavior in non-testing circumstances, perhaps through ethnographic studies and, if available, statistics regarding the usage of such tools in a platform.

One of the most notable challenges in the usability testing of e-book platforms is the exponential rate of platform modification. Vendors and publishers perform their own iterative testing and often release small updates on a recurrent basis. Since this study's testing was concluded, the researchers have already observed substantive changes to Springer Link, JSTOR, and CRCnetBASE, the latter of which has migrated to an entirely new platform. For future studies, researchers are encouraged to clearly document, for instance via notes and screenshots, the contemporary aesthetics and

functionality of each platform, since it may change before data analysis is complete. Even with such precautions to mitigate differences between testing and analysis, the possibility of changes appearing during testing procedures is still a risk which can seriously complicate the collection and comparison of data.

CONCLUSION

The researchers did not intend to find an overall "winner" among the platforms. However, the various comparative rankings and success/failure rates may prove valuable, or at least interesting, to libraries facing collection development decisions between these platforms. These data may also inform librarians as to which platforms may be better suited for a particular individual or population, and may provide an example of how other task-based comparisons of multiple platforms might be conducted. While content often drives platform choice, nevertheless in situations where the choice may be predetermined—these findings may make libraries proactively aware of usability concerns. Additionally this study findings may also inform library's user instruction efforts, in terms of recognizing which aspects of a given platform are less intuitive and may require more explication.

The data from this study shows patrons to have mostly preferred EBook Central's platform among all others tested, with it generating the highest number of votes for favorite platform, the lowest number of votes for least-preferred platform, and the second lowest average time per testing session. In terms of overall task success, however, EBSCOhost and Safari outperformed all others, with EBSCOhost achieving 100% OSR ratings on six of nine tasks, and with Safari achieving 100% OSR ratings on five of eight tasks. These two platforms also led the group in participant efficiency, with Safari generating a cumulative ESR of 98.3%, and with EBSCOhost producing a cumulative ESR of 91.92%.

Finally, this study's findings suggest several key vendor design recommendations to ensure an optimal user experience, including

- use of standard, recognizable icons to maintain consistency with user experience across the web;
- clear and readily visible explanatory text to accompany icons for which no standard exists;
- clear and logical choices regarding how and where content levels (e.g., book, chapter, page) are displayed and differentiated;
- consistent numbering of pages in both the book and the PDF file, even within chapter-level downloads; and
- clear and simple presentation of search results that mirror user experience across the web.

AUTHOR CONTRIBUTIONS

The authors have chosen to detail their contributions to this project according to the CRediT taxonomy (https://www .casrai.org/credit.html). All four authors contributed equally to Methodology, Investigation, Formal analysis, and Writing review and editing. Kat Mueller's additional contributions were Conceptualization, Project administration, Visualization, and Writing-original draft of the Abstract, Introduction, Results, Discussion, and Conclusion sections. The additional contributions of Zachary Valdes were Project administration (interim), Visualization, and Writing-original draft of the Results and Discussion sections. Erin Owens' additional contributions were Conceptualization and Writing—original draft of the Literature Review, Methodology, and Limitations and Further Research sections. Cole Williamson's additional contributions were Writing—original draft for the Literature Review section.

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Best of the Best Business Reference Web Resources 2019

BRASS Education Committee

BRASS Education Committee: Robbi De Peri, Co-Chair, Vanderbilt University; LuMarie Guth, Co-Chair, Western Michigan University; Charles Allan, Texas State University-San Marcos; Mary A. Aquila, Athens State University; Dr. Amanda Click, American University; Kimberly Lace Lee Fama, University of British Columbia; Bridget Farrell, University of Denver; Heather Howard, Purdue University; Hiromi Kubo; Helen Kula, CSU-Fresno; Jordan Michael Nielsen, San Francisco State University; Susan M. Norrisey, University of Virginia; Andy Spackman, Brigham Young University; Teresa Williams, Butler University.

Correspondence concerning this column should be directed to Robbi De Peri, Business Librarian, Vanderbilt University, Nashville, Tennessee (BRASS Education Committee Co-Chair, 2018–2019); email: robbi.deperi@vanderbilt.edu. he BRASS Best of the Best Business Reference Web Resources Award was established in 2009. The award recognizes three websites highly relevant to information professionals involved in providing business reference services. The websites are nominated and selected by the BRASS Education Committee members in October–November. The criteria include the quality of content, ease of use, and technical execution.

UNITED NATIONS WORLD TOURISM ORGANIZATION HTTP://WWW2.UNWTO.ORG/

The United Nations (UN) was formed after World War II with the mission of maintaining international peace and security. With almost 200 member states, the UN oversees numerous programs and funds, and since 1946 has negotiated agreements to establish working relationships with more than a dozen independent international organizations. These organizations, known as UN "specialized agencies," have long served as sources of information for business researchers, with perhaps the most recognized being the International Monetary Fund and the World Bank.

The UN specialized agency that devotes much of its efforts to the promotion and development of sustainable tourism is the United Nations World Tourism Organization (UNWTO). Headquartered in Madrid, Spain, the UNWTO was approved as a specialized agency by UN resolution in 2003. As described in its annual report, the UNWTO strives to "maximize the social and economic benefits of tourism while minimizing any negative impacts on host communities and the environment." With this emphasis, the agency's website is well-positioned as a starting point for those seeking reliable information on sustainability issues related to the travel industry.

While much of the UNWTO website provides free tourism information, it is important to note that some publications and statistics are freely accessible only by the agency's members, with subscription-based options for non-members. Membership includes 158 countries and more than 500 affiliated companies, educational and research institutions, and nonprofit organizations. Among the affiliate members from the United States are Colorado State University, Ernst and Young, and the Medical Tourism Association.

The UNWTO home page is colorful, with easy-to-find sections for news, events, and key issues. It also features a basic search box and links to the agency's social media postings. Visitors to the site will see a menu ribbon across the top for information under multiple categories. The About category leads to detailed descriptions of the UNWTO's history and structure, and two additional categories direct users to listings of members by country and by affiliation. Hovering on the What We Do category reveals subtopics arranged under titles that match the UNWTO's priorities: (1) mainstreaming tourism in the global agenda, (2) sustainable development, (3) ethics, culture, and social responsibility, (4) tourism and development, (5) competitiveness, and (6) fostering knowledge.

The two website categories most useful for those seeking free information are Tourism4SDGS and Communications. The Tourism4SDGs category leads to a platform developed by the UNWTO for exploration of 17 Sustainable Development Goals (SDGs). The interconnected SDGs are part of the UN-approved "2030 Agenda for Sustainable Development," with goals such as "No Poverty," "Zero Hunger," and "Gender Equality." Clicking on icons on the platform will open an interactive tool that maps worldwide policies and programs in support of the SDGs.

In addition to press releases, photos, and videos, the Communications category provides links to tourism facts and figures, including statistical infographics that can be downloaded as PDF files. Information seekers will also appreciate the "Glossary of Tourism Terms" with UNWTO definitions that explain concepts such as how a "tourism trip" is classified according to its purpose.

A somewhat confusing aspect of the Communications category is that the UNWTO Elibrary, which is fee-based for non-members, is linked in the publications section alongside the many free offerings. For those interested in a preview of the Elibrary, the UNWTO offers a 30-day trial, with subscription pricing varying by type of institution. Academic subscription fees are based on the institution's total enrollment and then further broken down by number of students in tourism-related studies, which the UNWTO defines as "Geography, Sociology, Economics, Politics, Management and other subjects with special focus on Tourism."

Sections of the UNWTO website would be improved with a more intuitive interface for browsing and searching. New or casual users may find themselves getting lost as they explore the site's many resources; for example, a click on a topic heading can lead to another part of the website with no obvious link back to the UNWTO homepage. A more functional alternative to browsing is the "A to Z" site map, a navigational tool found at the bottom of most category pages. The site map also allows users to jump to news and event listings by world region.

The UNWTO website is recommended for a varied audience in the academic, corporate, and nonprofit sectors, but especially for those interested in the trends, issues, programs, and policies pertaining to sustainable tourism. Many users will find what they need with the free offerings, but those seeking more detailed information would benefit from access to the subscription-based content.—*Teresa Williams*, Business Librarian, Butler University, Indianapolis, Indiana (BRASS Education Committee Member, 2018–2020)

U.S. TRAVEL ASSOCIATION HTTPS://WWW.USTRAVEL.ORG/

Comprising more than 1,200 member organizations, the U.S. Travel Association is focused on sustaining and growing the travel industry in the United States. The U.S. Travel Association conducts research, develops resources, and participates in advocacy designed to raise awareness of the travel industry and its impact on the US economy.

Information on the U.S. Travel Association's website is organized under a top-level menu with seven headings: Issues, Research, Events, Programs, News and Commentary, Membership, and About Us. The first heading, Issues, provides access to resources for international inbound travelers, and covers topics such as Customs and Entry and Trusted Traveler Programs. Additional topics covered under the Issues heading include National Parks, Infrastructure, and Tourism Budgets, with resources and statistical information provided for each. Industry Resources are also available under the Issues heading, and there are various toolkits found in this section for those seeking to organize and host events connected to the travel industry.

The bulk of the travel data and information that can be found on the U.S. Travel Association's website can be found under the Research heading on the navigation menu. The Research heading lists two separate subsections, Research Essentials and Interactive Data. The Research Essentials subsection features the Industry Answer Sheet, which provides freely accessible travel industry impact information for the United States across the leisure travel, business travel, and international travel sectors. Travel Facts and Figures, also located under Research Essentials, contains a collection of free reports, fact sheets, and graphics covering topics such as International Inbound Travel, Impact of Sports on Travel, Travel Creates Jobs, and more. The Country-Level Inbound Profiles section under Research Essentials contains country profiles for a handful of the United States' top inbound markets, including Japan, Germany, and Brazil. The Debrief, a monthly webinar series, and Travel Trends and Index are also featured under Research Essentials, but these features are accessible only to subscribers.

The Research heading on the top-level menu also provides access to a variety of free data tools, listed under the Interactive Data subsection, including the Downstream Impact Calculator, Economic Impact Calculator, and Economic Impact Map. The Downstream Impact Calculator is an interactive tool that allows researchers to simulate an increase or decrease in travel spending. Once a researcher has chosen a percentage change on the provided slider, the Downstream Impact Calculator shows a visual representation of the impact of that percentage change has on the economic output of other industries and on jobs. The

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Downstream Impact Calculator also includes an Effects of Policy section where researchers can explore the impact specific policies, such as the Open Skies agreement, have on economic output and jobs in travel and other industries. The Travel Economic Impact Calculator allows researchers to project how changes in travel spending will impact the economy of specific states. The Economic Impact Map gives researchers the ability to examine travel spending in congressional districts. Once a state and district selection have been made on the tool, a detailed report about the impact of travel spending on that district is generated. The Interactive Travel Analytics tool, the last tool listed in the Interactive Data section, supports visualization and analysis of US travel statistics, and it is only available to subscribers.

While there are additional headings listed on the website's menu, the information that is likely to be most beneficial to researchers will be found under the Issues and Research headings. The majority of the information that is freely-available is packaged in report form as a PDF. Website navigation is fairly intuitive, and is driven by the top-level menu that is featured prominently on most pages. Researchers can opt for using the search box to find information on the website, and information is searchable across all formats from toolkits to fact sheets. While there are a variety of free resources available on the U.S. Travel Association's website, many of the data tools, reports, webinars, and other resources are only available to paid subscribers. Despite the subscription limitations, the U.S. Travel Association's website is a great resource for researchers looking to do examine the relationship between the travel industry and the US economy.—Jordan Nielsen, Business Librarian, San Francisco State University, San Francisco, California (BRASS Education Committee Co-Chair, 2019–2021)

INTERNATIONAL TRADE ADMINISTRATION NATIONAL TRAVEL AND TOURISM OFFICE HTTPS://TRAVEL.TRADE.GOV/

The International Trade Administration (ITA), an agency of the United States Department of Commerce, provides information, services, and expertise to help US organizations compete in the global business environment. The ITA website menu directs users to a variety of helpful resources, including statistics, industry links, and export guides.

The NTTO (National Travel and Tourism Office) provides analysis and statistics in travel and tourism. Their focus is

to assist the US travel and tourism industry through four avenues: the travel and tourism statistical system (which is the only source of statistics on international travel to and from the United States); development of tourism policy; technical assistance for expanding international tourism; and assistance with travel export expansion.

The strongest content within the website is centered around the Travel and Tourism Statistical System for the United States, which provides national and local level data. This area includes regional of origin profiles, as well as sector profiles (airline, business, car rental, leisure, lodging, package, cultural-heritage; American Indian communities; and Shopping). Highlights of the statistical system include:

- Inbound Travel to the US
- Outbound Travel From the US
- <u>Survey of International Air Travelers</u> (In-Flight Survey)
- International travel receipts and payments data
- Canadian travel to and from the United States data
- Monthly tourism statistics (data goes back to 1996 and is current to the past quarter)
- Annual visitor spending (data goes back to 1960)

Diving deeper into their website, there are separate areas for the individual foci:

- <u>Tourism Policy</u>
- <u>Export Assistance</u> (features articles, presentations, and links to other US government travel related agency departments and staff)
- Industry Analysis

NTTO also provides TI (travel industry) news which is a free news and update service. The TINews Archive is available back to 1998. In addition, their links section focuses on the travel industry trade and highlights additional US federal government sources, as well as other travel and aviation organizations.

The NTTO website interface is minimalist at best, with data available as an excel download, PDF, or webpage depending on the individual statistic. Due to the depth of travel statistics available via NTTO, it is a valuable, free resource for anyone researching the travel industry. From the simplest <u>Fast Facts sheets</u> to detailed historical downloads, the NTTO generated content is appropriate for a variety of research level needs, and the free access makes it an option for any research budget.

RUSA Achievement Awards 2019

For questions about RUSA Awards, contact Shuntai Sykes, Membership and Programs Specialist, ssykes@ala.org.

RUSA and its Sections are home to many knowledgeable and influential librarians who place libraries users at the center of their work. Each year members of RUSA's Achievement Awards honor the most outstanding people, institutions, and projects in the field of reference and user services. This year's selections were made possible with the hard work of our many superb committee volunteers, the people who took the time to nominate awardees, and the vendors who sponsored the awards. For each of the awards the winner is listed with a brief summary of why they were chosen. Further information about the winners is available in the RUSA Update press releases http://www.rusaupdate.org/category /news/awards-news/. The nomination period for the 2020 Awards opens in October 2019. See the individual award websites at http://www.rusaupdate.org/awards/ for further information.-Editor

BRASS AWARDS

The **BRASS SimplyMap Student Travel Award** enables a student enrolled in an ALA-accredited master's program to attend an ALA Annual Conference. The award is given to a candidate who has demonstrated an interest in pursuing a career as a business reference librarian and has the potential to be a leader.

Zoeanna Mayhook, MLIS student at the University of Washington. She currently works as a Graduate Reference Specialist at the University of Washington Tacoma Library and as a Legal Investigator and Researcher for Friedman Rubin Law Firm in Bremerton, Washington. Mayhook also serves as the Publicity Officer for the University of Washington Chapter of the Special Library Association (SLA-UW). While pursuing her MLIS at the University of Washington, Mayhook has completed coursework in Business Information Resources, Government Publications, and Academic Librarianship.

Sponsored by SimplyAnalytics/SimplyMap (Geographic Research)

The **BRASS Global Financial Data Academic Business Librarianship Travel Award** is awarded to a librarian new to the field of academic business librarianship to support attendance to the ALA Annual Conference.

Abigail Morgan, Social Sciences and Business Librarian at Miami University. She is currently the liaison to the Economics, Education, Juvenile Literature, and Teacher Education faculty and shares responsibility for Marketing. Morgan is a new (and enthusiastic) member of BRASS and is also a member of the ALA Games and Gaming Round

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Table. She is looking forward to attending her first ALA annual conference.

Sponsored by Global Financial Data

The **BRASS Morningstar Public Librarian Support Award** is awarded to a business reference public librarian to support travel costs to attend the ALA Annual Conference.

Amilcar Perez, Adult Services Librarian at Forest Park Public Library. Perez's main areas of focus are to increase visibility to the business community, build digital literacy, promote job and career development, and design assessment methods to identify gaps between community needs and programming. He has made distinctive impact on a new series at FPPL, "Explore Forest Park," which highlights local businesses.

Sponsored by Morningstar

The **BRASS Emerald Research Grant Award** is given to support research in business librarianship.

Amanda Click, Business Librarian, American University, along with her research teammates Claire Wiley, Research and Instruction Librarian, Belmont University, and Meggan Houlihan, Coordinator of Library Instruction and Student Programs, New York University Abu Dhabi. The winning project was "The Framework in Business Information Literacy: A Mixed Methods Study." The study will include a systematic review, a survey, and focus groups with the goal of identifying best practices and new ideas for teaching as well as increasing the value of the Framework for business librarians.

Sponsored by Emerald Publishing

The **BRASS Mergent**, by FTSE Russell, Excellence in **Business Librarianship Award** recognizes an individual who has distinguished him or herself in the field of business librarianship.

Todd Hines, Manager, Research and Discovery and Business Research Librarian, Stanford University GSB Library. Hines received this award for his distinguished achievement and service in business librarianship; for his work as founder of the Journal of Business and Finance database review column; and for his recognized excellence in mentoring both new and seasoned librarians. Hines has been a leader, a contributing committee member, and a long-time member of RUSA and BRASS.

Sponsored by Mergent, by FTSE Russell

COLLECTION DEVELOPMENT AND EVALUATION SECTION (CODES)

The **Louis Shores Award** recognizes excellence in reviewing of books or other materials for libraries.

Donna Seaman, Adult Books Editor, *Booklist*. Donna Seaman's contributions to the field of book reviewing have been undeniably outstanding in both breadth and depth. The many thousands of reviews she has written demonstrate her

deep knowledge and experience. Her work as an editor of book reviews has also been immensely valuable to innumerable *Booklist* readers, and the author interviews she has aired on WLUW's *Open Books Radio* have brought her passion for books to the Chicago public as well.

EMERGING TECHNOLOGIES SECTION (ETS)

The **ETS** Achievement Recognition Award is presented in recognition of excellence in service to the ETS section.

Donna Brearcliffe, Acting Head, Humanities and Social Sciences Section, Researcher and Reference Services Division of the Library of Congress. Brearcliffe served as Chair of ETS shortly after the section changed its name from MARS. She advocated strongly for completing that transition and embracing the opportunities that could come from firmly focusing the section around emerging technologies.

HISTORY SECTION (HS)

The **Genealogy / History Achievement Award** was established to encourage, recognize, and commend professional achievement in genealogical reference and research librarianship.

Mary Lovell Swetnam, Special Collections Librarian, Virginia Beach Public Library. Her passion for librarianship, for the special collections she manages, and in serving the Virginia Beach community, is as evident today as it has been for the more than three decades she has worked in libraries. Swetnam received this award for her enthusiastic service and commitment in helping her patrons with genealogy and local history research; for her dedication in helping preserve the local history of her community through the archival record.

Sponsored by ProQuest

The **Gale Cengage Learning History Research and Innovation Award** is presented annually to a librarian to facilitate and further research relating to history and history librarianship.

Jennifer Brannock, Curator of Rare Books and Mississippiana, University of Southern Mississippi Libraries. Ms. Brannock was selected for her innovative historical research in support of her project "Con Sellers, Masculinity, and the Publishing Industry: Lowbrow Publications in Midcentury America."

Sponsored by Gale Cengage Learning

SHARING AND TRANSFORMING ACCESS TO RESOURCES SECTION (STARS)

The **Atlas-Systems Mentoring Award** is awarded to two library practitioner new to the field of interlibrary loan, document delivery, or electronic reserves, and supports travel expenses for the ALA Annual Conference.
Pearl G. Adzei-Stonnes, Public Services, Acquisitions and Interlibrary Loan Librarian at Virginia Union University. Adzei-Stonnes was chosen as the winner of the STARS Atlas Systems Mentoring Award because the essay submitted had an overall theme of leadership.

Guerda Baucicaut, Inter Library Loan and Reserves Specialist at the City University of New York. Baucicaut understands the importance of networking and actively seeks out opportunities to learn from others in the profession. Her essay also emphasized the need for continuous learning for librarians and users alike.

Sponsored by Atlas Systems

The Virginia Boucher-OCLC Distinguished Interlibrary Loan Librarian Award is given to a librarian for outstanding professional achievement, leadership, and contributions in interlibrary loan and document delivery.

Zack Lane, Head of Delivery Services, Butler Library, Columbia University Libraries. Lane was nominated by three of his peers for his efforts to use data to demonstrate that common lending practices were wasting staff time and doing a disservice to library users. His solid evidence makes a case for setting aside old ways of thinking and focusing instead on adding value to every transaction for every library user. Lane's analysis of Columbia University's lending and borrowing led him to change their policies, which led to a widespread and increasing adoption of a 16-week loan period.

Sponsored by OCLC/WorldCat

REFERENCE AND USER SERVICES (RUSA)

The **John Sessions Memorial Award** is presented to a library or library system in recognition of significant efforts to work with the labor community.

The **Iowa Labor Collection and Iowa Labor History Oral Project**, State Historical Society of Iowa. The Iowa Labor Collection is widely regarded as one of the most comprehensive labor history collections in the world, and ILHOP is one of the only large-scale oral history projects initiated and funded by labor unions themselves. ILHOP and the Iowa Labor Collection represent an enduring partnership between Iowa labor unions and the State Historical Society.

Sponsored by the Department for Professional Employees, AFL-CIO

NoveList's Margaret E. Monroe Library Adult Services Award recognizes a librarian who has made significant contributions to library adult services.

Nicolette Warisse Sosulski, Business Librarian at Portage District Library. Sosulski developed innovative modes of service in areas including business librarianship, the reference interview, virtual librarianship, assistance for those with medical and insurance questions; and instructional librarianship, then shared these methods with colleagues and students through courses, presentations, and articles. Her columns "A Reference for That" for *RUSQ* and "Real-Life Reference" for *Booklist* have provided insight, humor, and compassion for professional colleagues. She has also supported library publications behind the scenes, serving on editorial boards and as a column editor for *RUSQ*.

Sponsored by NovelList

The **ReferenceUSA Award for Excellence in Reference and Adult Services** recognizes a library or library system for developing an imaginative and unique resource to meet patrons' reference needs.

Heather Holtzman, Reference and Instruction Librarian at St. Petersburg College. Their Speed Dating project is an interactive series of instructional and supplementary materials that will be used to educate students and faculty on the different types of databases offered by St. Petersburg College. Holtzman strives to learn new things and to help her community. These efforts have included serving as an ALA member, volunteering in the public sector at Palm Harbor Library, and coordinating outreach opportunities in the greater community. At SPC, Holtzman has served on the Career and Academic Communities Leadership Triad Team (Business), the SPC Reads Committee, and implemented the weekly writing workshop "Hard Times" that created a safe and collaborative support network for students to express themselves through writing.

Paula Knipp, Reference and Instruction librarian at St. Petersburg College. Knipp currently serves as co-chair of the SPC Reads Committee (One Book One College program) and as Secretary of the SPC Alumni Association Board of Directors. Knipp is a member of the Florida Library Association's Legislative and Advocacy Committee and has previously worked on the FLA Personnel and Recruitment Committee. Passionate about library services, Paula and has helped secure grants for the center's STEAMworks technology lab as well as a grant to gamify library instruction sessions called Not-so-trivial pursuit: Incorporating games and active learning into library instruction.

Kassie Sherman, Library Services Paraprofessional at St. Petersburg College's Tarpon Springs Campus. As a current graduate student in the Masters in Library and Information Science program at the University of South Florida, Sherman combines her current studies with practical, on-thejob library experience to further develop her instructional skills. Sherman is a member of the Leepa-Rattner Museum of Art Education and Outreach Committee which focuses on creating educational opportunities with the museum for St. Petersburg College students as well encourages outreach to the community at large.

Sponsored by Reference USA

The **Isadore Gilbert Mudge Award**, RUSA's highest honor, is given to an individual who has made a distinguished contribution to reference librarianship.

Kay Ann Cassell, Professor Emerita, School of Communication and Information, Rutgers University. Cassell has

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been a dedicated member and contributor to state, national, and international professional organizations—including the Presidency of RUSA, a decade on the ALA Council, chair of the ALA Publications Committee, the ALA Membership Committee, SRRT and a myriad of feminist activities. Cassell has a distinguished career as reference librarian and reference educator, teaching emerging models in a constantly changing world; her scholarship as co-author of the leading textbook on reference, now in its fourth edition; and her active role in professional library organizations at the state, national, and international levels are works that continue the legacy of scholar librarians begun by Isadore Gilbert Mudge at Columbia University so many years ago.

Sponsored by Credo Reference

2018 Annual List of Best Historical Materials Selected by RUSA's History Section Experts

RUSA History Section Historical Materials Committee

RUSA History Section Historical Materials Committee provides the 2018 Best Historic Materials list. The committee consists of Eileen Bentsen, Baylor University; Steve Knowlton, Princeton University, co-editor; Sue McFadden, Indiana University East, chair, coeditor; Mackenzie Ryan, Texas State; and Amanda J. Wahlmeier, Johnson County Library, Kansas.

Learn more about RUSA's Book and Media Awards at www.ala.org/rusa/awards. The RUSA/CODESS Historical Section's Historical Materials Committee follows an established method to identify the best materials for the year. The process uses standardized criteria, a broad, national call for nominations, and the work of committee members to review and select from the nominations. The 2018 Best Historical Materials' list is a mix of digital archives, collections, indexes, and print bibliographies that promote the research of unique, rich, and specialized collections. All resources were last reviewed on January 21, 2019.—*Editor*

African Kingdoms: An Encyclopedia of Empires and Civilizations. Edited by Saheed Aderinto. Santa Barbara, CA: ABC-CLIO, 2017. 363 pp. \$89 hardcover (ISBN: 9781610695794). E-book also available (9781610695800).

While its title implies that this work will focus on political history, it is actually (according to its introduction) "a reference book on African civilization before the 1880s." After a valuable editor's introduction that lays out important themes in African history, a series of alphabetical entries cover polities ranging in time from the third millennium BCE. (ancient Egypt) to the twentieth century CE (Asante, Buganda, and several others). A selection of primary sources follows. An index, timeline, and glossary are included. In addition to narratives of political and military history for each nation, there is discussion of developments within economic, cultural, and religious life that shaped the history of the kingdoms. Interactions between kingdoms and with European and Arab traders and diplomats are also covered. Each entry includes suggestions for further study. The works are written to be accessible to advanced high school and undergraduate readers. Recommended for school, college, and public libraries.—Steven Knowlton, Princeton University

Harvard University. *Colonial North America at Harvard Library*. http://colonialnorthamerica.library.harvard.edu/spot light/cna.

Expanding access to primary source documents through digitization, this collection focuses on archival records in various Harvard University Library collections from the seventeenth and eighteenth centuries (passing from the Colonial to the Early Republic era of American history). The documents are diverse—wills, inventories, maps, mathematical texts, correspondence, bills of lading, etc.—and the digitization is of very high quality. There are several curated collections that gather various documents around a theme—medicine, material culture, women, the sea, etc.

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—with a useful introductory essay regarding the information to be found, its application to the theme, and the place of the theme in historical studies. Users may browse the thematic collections or search by keyword (excellent metadata for searching is provided). The viewer is well-designed, with multiple options for manipulating, saving, citing, or sharing the image. This source will be most useful for high school, college, and public libraries.—*Eileen M. Bentsen*, *Baylor University*

Grossman, Mark. Constitutional Amendments: Encyclopedia of the People, Procedures, Politics, Primary Documents Relating to the 27 Amendments to the U.S. Constitution, 2nd ed. Amenia, NY: Grey House, 2017. 2 vols. \$275 hardcover (ISBN: 9781682171769). \$344 e-book (978-1-68217-177-6).

Much of American jurisprudence and political debate centers around the amendments to the United States Constitution, and the interpretations given to their texts. Grossman's two-volume set, a revision of his 2012 edition, offers vital context for such interpretation. The complete text of each amendment is reproduced, along with timelines of their progress toward ratification, introductory materials that outline the contemporary political questions that motivated the amendments, selections from congressional debates and the opinion pages of newspapers, subsequent Supreme Court cases involving the amendments, capsule biographies of individuals important to the amending process, and social history documents such as advertisements and commodity prices from the time period of each amendment. An index is included. Any interested citizen will benefit from the information presented here, and it is appropriate for all libraries.—Steven Knowlton, Princeton University.

United States Holocaust Memorial Museum. "Holocaust Encyclopedia." https://encyclopedia.ushmm.org/.

Preserving the artifacts, memories, and history of the Holocaust in terms accessible to students, educators, and policymakers, the Encyclopedia of the Holocaust also aims to develop critical thinking skills and help its users combat Holocaust denial arguments. Oral histories, photographs, maps, and documents provide primary source evidence for personal, research, and classroom use. Context is provided by essays, video interviews with curators describing research into specific artifacts in the collections, and animated maps. The encyclopedia provides keyword searching with optional limiting by content type and language; users can also browse by tags or an A-to-Z table of contents. Accessibility level varies with each item-some videos have transcripts or captions, others have none. The encyclopedia also includes resources for teachers: critical-thinking questions for selected essays, the very accessible essay "How to Identify Reputable Historical Sources," curriculum guides (on the museum's page), and more. Valuable for school, college, and public libraries.—Eileen M. Bentsen, Baylor University

Digital Scholarship Lab, University of Richmond. *Mapping Inequality: Redlining in New Deal America*. https://dsl.richmond.edu/panorama/redlining/.

Mapping Inequality: Redlining in New Deal America is the product of the University of Richmond's Digital Scholarship Lab, with contributions from the University of Maryland, Virginia Tech, and Johns Hopkins University. The site provides access to the Depression-era records of the Home Owners' Loan Corporation (HOLC) that highlight the practice of redlining in the real estate industry. The HOLC maps outline areas deemed a secure financial investment in green, declining areas in yellow, and areas of increased financial risk in red. However, their reasoning for these rankings often had a racist base that resulted in neighborhoods with large numbers of people of color being more likely to receive a red outline. The information displayed on the site helps users interpret redlining's impact on urban neighborhoods and the current economic conditions of their city. Users can interact with these records by viewing various cities, selecting different neighborhoods within those cities, and filtering areas based on HOLC's grading system. The site opens with instructions on viewing the materials and downloading the images. Users can zoom in on their current city or find information for other areas using the search function. The navigation bar lists an introduction, detailing the background of the HOLC's grading system and information on the archival process; a bibliography and bibliographical note with a comprehensive listing of studies about HOLC's system, segregation, and discrimination; an "About" section with information on the contributors to the site; and a "Contact Us" page. The site can be used by the average public library patron, but would most benefit academic researchers. This unique site gives a convenient, accessible place to access information only found using resources housed in multiple locations.—Amanda Wahlmeier, Johnson County Library, Shawnee Mission, Kansas

Not Even Past: The Public Archive: Doing History Online and In Public. https://notevenpast.org/the-public-archive/.

The Not Even Past website includes blogs, reviews on historical materials from all over the world, The Public Archive: Doing History Online and In Public collection of student works, and archived episodes of the podcast 15-Minute History. The website is edited by Professor Joan Neuberger, Professor of History at the University Of Texas (UT), Austin. This random assortment of archived materials showcases work developed by UT graduate students and faculty. Graduate students in a Public and Digital History Seminar develop archives for The Public Archive: Doing History Online and In Public. These works were previously not digitized and the students select the topics with the assistance of UT librarians. Most collections represent a physical archive on the UT campus. As Neuberger notes, "Each website includes digitized archival documents, 2 or more blog-essays to make the archival material accessible and provide historical context for them, and two lesson plans for ideas about how to teach related subjects

using these documents." The Department of History at UT Austin provides the website and organizational support. The site is composed of collections relevant to both world and US history; for example, The Road to Sesame Street and Mercenary Monks. The blogs, lesson plans, and digitized information provide pieces to the historical puzzle. Podcasts and search functions add to the research opportunities. Additional lists of resources connect these vignettes of history to a solid historiographical foundation. This is a project that enlightens viewers through content and context. Another archive-blog, Guards and Pickets: The Paperwork of Slavery, is an example of an emotional and exemplary view of history. The site remains active with plans to add historical materials into the future. It is recommended for students in grades 6-12, undergraduate students, and individuals interested in wide-ranging historical content.—Sue McFadden, Indiana University East

Van der Vieren, Monica. *On the Trail of the North American Buf-falo*. https://thebuffalotrail.maps.arcgis.com/apps/Cascade /index.html?appid=1806faa8349048c891576d4a83a7a8ac.

On the Trail of the North American Buffalo is a website with content primarily written by Monica Van der Vieren with assistance from Shaun O'Neil and input from many other historians and historical institutions. The site provides a chronological timeline of the North American buffalo, or bison, starting with the Ice Age 1.8 million years ago. It also gives information on other elements of natural history, such as ice sheets, tectonic plate shifts, grasslands, and prairie ecology. Users scroll through the timeline interspersed with primary sources including photographs, videos, and maps related to the buffalo and its habitat. Unfortunately, there is no search function, but topic areas such as arrival of the buffalo, the great slaughter of the nineteenth century, and new trails are listed at the top of the site so users can navigate through the timeline without endless scrolling. The site provides a comprehensive look at a natural history topic in an engaging and appealing format and ends with an extensive bibliography that can guide the user to more information on any given aspect of the buffalo's life. The information is best suited for the average public library patron or high school level researcher.—Amanda Wahlmeier, Johnson County Library, Shawnee Mission, Kansas

Reforming America: A Thematic Encyclopedia and Document Collection of the Progressive Era. Edited by Jeffrey A. Johnson. Santa Barbara, CA: ABC-CLIO, 2017. 2 vols. \$189 hardcover (ISBN: 9781440837203). E-book also available (9781440837210).

The Progressive Era was a time of seeming contradiction, as reforms that expanded individual rights and political reform ran into movements to entrench segregation, promote eugenics, and mechanize the workplace. As such, current students of history may find it challenging to understand historical actors and events of the period without appropriate contextual information, which *Reforming America* strives to provide. It is organized thematically (Social and Political Life; Work and Economic Life; Cultural and Religious Life; Science, Literature, and the Arts; Sports and Popular Culture), with each section containing short alphabetized entries, followed by a selection of primary sources. Each entry includes suggestions for further reading, and the bibliographic essay and timeline further enhance its usefulness. An index is included. It is most appropriate for school and public libraries. —*Steven Knowlton, Princeton University*

Bookheim, Louis W. Reports of U.S. Presidential Commissions and Other Advisory Bodies: A Bibliographic Listing, updated ed. Getzville, NY: Hein, 2017. 572 pp. \$275 hardcover and online package (ISBN: 9780837740188).

From the time of Andrew Jackson, presidents have appointed special commissions to deal with matters that fall outside of the purview of congressional committees or departments of the executive branch. Often, these commissions have an investigatory function and their reports prove to be of great value by gathering together information that would otherwise be scattered; in all cases, their reports are a primary source of use to historians, political scientists, economists, and other scholars. However, the reports are not necessarily included in the Public Papers of the Presidents, nor in the Weekly Compilation of the Presidential Documents. Bookheim has performed the valuable service of locating publication information for nearly all of the commissions' reports (some are classified), and plans to continue to add new entries to the online version of the book. Where reports are found in the Congressional Serial Set, Bookheim provides citations; otherwise, he offers full title entries, along with, as relevant, SuDoc numbers, OCLC record numbers, or archival locations. Researchers should, with a quick reference to the entry and access to WorldCat, be able to immediately identify a library or archive that holds a given report. The volume is indexed by presidential administration and by commission name. This volume is especially appropriate for law libraries and research libraries.—Steven Knowlton, Princeton University

Women in American History: A Social, Political, and Cultural Encyclopedia and Document Collection. Edited by Peg A. Lamphier and Rosanne Welch. Santa Barbara, CA: ABC-CLIO, 2017. 4 vols. \$415 hardcover (ISBN: 9781610696029). E-book also available (9781610636036).

The subtitle of this encyclopedia is indicative of its ambitious scope. The work encompasses not only capsule biographies of important historical figures, but also discussions of law, cultural mores, economics, and political movements as factors in women's lives throughout American history. Each volume covers a separate time period, and within the time period presents a historical overview, numerous alphabetical entries interspersed with occasional primary sources, a thematic issues essay, and a bibliography. In addition, each entry includes suggestions for further reading. Throughout the work, the editors have ensured that the emphasis upon

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providing social and legal context for the discussion within any entry is maintained, and this gives the reader a better sense of the work of historians than do many historical encyclopedias. Any researcher beginning with this volume will be well served in framing a research question appropriate to the era and the field of women's history. The entire work is thoroughly indexed. Appropriate for all libraries, but especially for public and school libraries.—*Steven Knowlton*, *Princeton University*

British Library, World War One. https://www.bl.uk/world -war-one

The British Library brings together materials from various institutions across Europe in this comprehensive website focusing on Europe in World War I. The website features more than 500 items including photographs, videos, diaries, books, cartoons, and other types of materials that provide evidence about the ways that Europeans experienced the war on both sides of the conflict. Users can explore materials by theme, search using keywords, and filter collections by years, languages, creators, and formats. In addition to the digitized collections, the website also features articles written by historical experts, interviews, and teaching resources with lesson plans designed for middle and high school students. This resource is suitable for any type of library and would be helpful for researchers of any skill level interested in World War I as well as middle school and high school teachers interested in teaching with primary resources.—*Mackenzie Ryan, Texas State Library and Archives Commission, Austin, Texas*

WW1—The Definitive Collection, from British Pathé. https:// www.britishpathe.com/workspaces/page/ww1-the-defini tive-collection

British Pathé, a newsreel and documentary production company, holds an extensive collection of archival film footage from World War I. Now available online, the footage provides a rare glimpse into various aspects of life during the Great War. The films in this collection are international in scope and organized into categories such as political leaders including President Woodrow Wilson and Tsar Nicholas II, battles and types of warfare, and experiences of civilians during and after the war. Users can also search for films by keyword; the results are drawn not only from the World War I collection but also the entire catalog of British Pathé's film archives. Each film includes a short summary and description with options to view the films in full screen or as individual stills. The website is an excellent source for researchers of any level interested in primary source materials on World War I and may be of particular interest to those in academic and research libraries.—Mackenzie Ryan, Texas State Library and Archives Commission, Austin, Texas

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Growing Your Library Career with Social Media. By Daniella Smith. Cambridge: Chandos, 2018. 198 p. Paper \$79.95 (ISBN 978-0-0810-2411-9). Ebook Available (978-1-4408-5143-8), call for pricing.

Social media remains a very important element in our daily lives, regardless of what level we may interact with it. Daniella Smith's book provides an overview of how social media influences our professional lives and the long lasting effect it may have. The book provides general examinations of social media's functionality and specific impacts it has on library career development. It covers a wide array of social media tools across various platforms. It also contains interviews highlighting practical examples of how our peers engage with social media to highlight or promote their library careers. The book contains 10 chapters and 10 appendixes. With the exception of the last chapter, each chapter has a challenge section, providing actionable items that we can use in developing our social media skills.

The first few chapters provide the reader with a background of how social media interacts with our society as a whole and libraries specifically. Chapter 3 focuses on personal branding and using social media for career development. Chapter 4 covers social media sites centered on career development, such as Linkedin. Chapter 5 centers on tools that interact and automate your social media presence, such as RSS feeds and HootSuite. One particular tool, called "If This Then That," is highly useful for automating engagement with social media.

Chapter 6 offers helpful pointers in understanding how copyright interacts with social media and protecting your personal branding. Chapter 7 focuses on infographics and their use in social media. The chapter has a great section providing sites that allow you to create various graphics and charts. While chapter 8 focuses on safety and privacy, chapter 9 covers blogging and the use of WordPress. While relatively short, chapter 9 does offer quick and concise instructions for writing your first blog post. Chapter 10 is a summation of how one would use the information provided in this book and covers being professional online.

The appendixes feature various useful content. For example, the first appendix has a listing of statistical websites, used for enhancing information that you would like to display, such as on an infographic. The second appendix lists websites that host pictures or graphics for posting on social media. Other appendixes include lists social media sites and tools, library social media pages, library blogs, and librarians to follow on Twitter.

The book not only provides you with social media tools and resources, but also helpful advice on what you should do to be successful in promoting your library career online. As with any book focusing on specific technology, it can quickly become outdated. However, this book can be a long-term resource helping to navigate social media and establish best practices in promoting one's library career. Highly recommended.—*Hector Escobar, Director of Education and Information Delivery, University of Dayton, Dayton, Ohio*

RUSQ considers for review reference books and professional materials of interest to reference and user services librarians. Serials and subscription titles normally are not reviewed unless a major change in purpose, scope, format, or audience has occurred. Reviews usually are three hundred to five hundred words in length. Views expressed are those of the reviewers and do not necessarily represent those of ALA. Please refer to standard directories for publishers' addresses.

Correspondence concerning these reviews should be addressed to "Professional Materials" editor, Calantha Tillotson, Instructional Services Librarian, East Central University; email: ctillotsn@ecok.edu.

Library Service and Learning: Empowering Students, Inspiring Social Responsibility, and Building Community Connections. Edited by Theresa McDevitt and Caleb P. Finegan. Chicago: ACRL, 2018. 438 p. Paper \$78.00 (ISBN 978-083894609-1).

Service learning is a type of experiential learning through which students learn while engaged in a service project. A librarian's role might involve helping students frame research questions, introducing library resources, or teaching information literacy concepts. In "Introduction to Library Service and Learning," the editors note the transformative learning potential of service learning opportunities. These types of learning experiences allow students more self-direction and a chance to have a real impact on the community; they are hands-on, student-focused, and authentic. Twenty-one chapters detail unique examples of how academic librarians collaborated with campus or community partners to integrate the library into a service learning project. A final chapter presents a review of literature on service learning that complements the book's contents.

There are many moving parts to service learning projects, and this book presents them in a detailed and consistent format that makes them seem less daunting and more doable. Each chapter provides an overview of a specific service learning activity, a description of the people involved, details of the steps followed, project feedback and assessment, a conclusion, and an appendix of materials. Within these categories, the authors address the importance of student reflection as part of the learning experience. They also describe any difficulties they encountered.

Library Service and Learning is recommended for academic librarians who are interested in beginning or expanding their involvement with service learning educational opportunities. They can choose from a wide range of topics covered in the various chapters and draw upon the detailed examples to begin their own projects. The examples provide not only a practical guide for librarians but also a resource to help convince potential partners to engage in collaborations. Unfortunately, the book lacks an index that would help someone locate terms mentioned throughout the text. —*Cheryl McCain, Library Instruction Coordinator, University of Oklahoma, Norman, Oklahoma*

Your Passport to International Librarianship. By Cate Carlyle and Dee Winn. Chicago: ALA, 2018. 132 p. Paper \$49.99 (ISBN 978-0-8389-1718-3).

For those interested in recharging their career, exploring new places, or gaining unique experience, Carlyle and Winn's approachable and pragmatic volume *Your Passport to International Librarianship* will prove useful. The book covers the entire process of working internationally as a librarian, including visiting libraries while on personal vacations, as well as volunteering with international organizations, such as library nonprofits. The authors cover the benefits of international travel and volunteering, preparations necessary both personally and professionally, personal experiences, and advice for collaborating with your host library after returning home.

Each chapter also pulls out quotes from experienced international librarians and their host librarians to add more voices to the narrative. Written in a conversational tone, the advice comes across as a well-travelled friend giving you advice and ends with a useful resource list, providing those dreaming of working abroad a jumping-off point. It is also important to note that the book does discuss being a humble traveler and not bringing a colonizing attitude when working internationally.

The main limitation of the book is that while the authors cover the many possible avenues for international librarianship, they focus mainly on their own experiences. This results in Librarians Without Borders getting the majority of coverage in the book, although the authors acknowledge this and offer information on other opportunities. For this same reason they are also able to offer in-depth coverage, advice, and personal anecdotes, which makes the book enjoyable and relatable.

The book is an excellent starting place for working internationally as a librarian, most likely as a volunteer. It is a useful read for any library professional or library school student interested in pursuing an international library adventure.—Jessica Martinez, Assistant Professor, Science Librarian, University of Idaho, Moscow, Idaho

Reengineering the Library: Issues in Electronic Resources Management. By George Stachokas. Chicago: ALA, 2018. 336 p. Paper \$79.00 (ISBN 978-0-8389-1621-6).

The increasing prevalence of electronic resources in academic libraries has forced information professionals to rethink many aspects of library services. The last couple of decades have seen significant updates to national standards of practice and librarian core competencies. This book presents a well-rounded view of the current state of electronic resources management in academic libraries, with chapters covering a wide variety of topics, including discovery, analytics, vendor relations, and departmental reorganization. Even if managing electronic resources is not one of your primary job duties, this book can provide valuable insight into an ever-growing field of librarianship that impacts library service at all levels.

For those new to the world of e-resources management (ERM), this book is an excellent resource for getting started on the cutting edge of e-resources librarianship. While the author sprinkles argon and acronyms throughout the book, the early chapters define each term. A few chapters also provide a historical view of certain standards and practices, offering context for recent changes in the field. Addressing nearly every aspect of ERM, the book acknowledges the jack-of-all-trades nature of being an e-resources librarian (ERL). The numerous skillsets required for effective ERM

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can sometimes be overwhelming for a new librarian, but this book successfully delineates each area of responsibility with real-world examples.

If you are a seasoned e-resources librarian, this book will present you with many ideas for streamlining workflows and updating procedures to comply with current best practices. Several chapters present case studies and examples of what academic libraries across the country are doing to update their approach to ERM. For example, one chapter covers ackend techniques regarding licensing, metadata creation, and data collection, and another examines a few specific service and software platforms, such as EBSCO Discovery Service and CORAL. Multiple chapters also discuss the importance of interdepartmental communication and collaboration, particularly between Technical Services and Public Services. Because the technical aspects of electronic collections and their access platforms are in constant flux, there is an everincreasing need for continuous e-resources training among staff. When library staff across multiple departments are able to navigate and troubleshoot issues effectively, this can have a considerable positive impact on the experience of end users.

This book illustrates why effective management of electronic resources is a vital component of quality library service. With content from a variety of experts working in academic libraries across the United States and Canada, George Stachokas has compiled a superb resource on this topic of librarianship.—*Casey Lowry, Collection Services Librarian, East Central University, Ada, Oklahoma*

Successful Campus Outreach for Academic Libraries: Building Community through Collaboration. Edited by Peggy Keeran and Carrie Forbes. Lanham, MD: Rowman & Littlefield, 2018. 250 p. Paper \$95.00 (ISBN 978-1538113707).

Outreach is an increasingly important responsibility for academic libraries, fulfilling the library's own mission and supporting the wider institution's goals around retention and student success. Unfortunately, it can be challenging to connect outreach initiatives to desired outcomes. Into this knowledge gap step Peggy Keeran and Carrie Forbes, who have edited a collection of outreach initiatives and strategies organized around four key elements of a successful outreach program: strategic vision and planning, program development and implementation, community outreach, and expanding outreach audiences. Individual chapter authors come from large and small universities in both public and private contexts, and present library outreach initiatives from the United States, Canada, and Indonesia.

Part 1 includes three chapters on the elements of successfully preparing a new outreach program. Most broadly applicable is Rosan Mitola's "Plan, Prioritize, and Partner" model for designing events and other outreach initiatives. Part 2 explores program development and implementation, and presents three case studies of implementing outreach programs for specialized audiences or using new technologies. Part 3 steps beyond the campus boundaries to explore initiatives that target the wider community—of particular note here is Paul Mascareñas' and Janet Lee's discussion of Regis University's information literacy outreach initiative at a local "feeder" high school. Part 4 encourages readers to think outside the box with outreach strategies and audiences, examining ways to engage students at Canadian polytechnic universities, launching a Student Advisory Board, or focusing on meeting the unique needs of graduate students.

Keeran and Forbes have assembled a collection that both provides examples of successful outreach initiatives and possible frameworks for a library to use in designing its own programs. This book deserves a space on every outreach public librarians' reference shelf and can be useful to academic library administrators interested in finding synergies between library outreach goals and the larger strategic vision of the institution the library serves. Beyond the library, university marketing and student affairs administrators may find this book an interesting read as well, given the emphasis on the role of collaboration within all of the chapters. It also provides non-librarians with a useful overview in how the library can serve as a partner in broader university outreach and marketing initiatives.—*Sarah Clark, Dean and University Librarian, La Salle University, Philadelphia, Pennsylvania*

Metaliterate Learning for the Post-Truth World. Edited by Thomas P. Mackey and Trudi E. Jacobson. Chicago: ALA, 2019. 230 p. Paper \$64.99 (ISBN 978-0-8389-1776-3).

One of the great challenges in librarianship currently is educating digital natives on how to identify misinformation and "fake news," while also transforming them into information literate, responsible consumers, and creators of knowledge. Since 2011, metaliteracy has been proffered as a potential cure for the current relativistic "post truth" era. Written and edited by experts in this subject, Metaliterate Learning for the Post-Truth World introduces the reader to the concept of metaliteracy, a pedagogical model emphasizing reflective learning and the informed production of new knowledge. Summarized as "knowing how to think, not what to think," metaliteracy does not focus on discrete information literacy skills, instead stressing a holistic approach to literacy and learning. The theoretical framework advocates guiding students to responsible interaction with information as both consumers and creators by teaching them to understand their own biases and emotional responses to new information. Under this model, students would be better prepared to access and accept changes to currently held beliefs when new information becomes available.

Written with information professionals in mind, the first half of the book introduces the reader to the theoretical underpinnings of metaliteracy, particularly the efficacy of its use as a pedagogical model and encouraging the reframing of learning experiences to encourage students to reflect on their thinking, understanding, absorption, and creation of

information. Chapters include examples of how metaliterary would provide solutions to strengthening scientific literacy and interacting with online misinformation. This part of the book introduces the reader to the arguments as to why information literacy efforts should be framed as both an antidote to misinformation and as a producer of responsible digital citizens. The second half is devoted to real-world applications of the theory in various higher education classroom settings, including educating other information professionals. This is particularly useful to librarians who find the integration of the theories of metaliteracy into concrete learning experiences daunting.

This book is a good primer to theoretical aspects of concept, as well as containing practical applications. Its multidisciplinary approach to the subject matter encourages not just librarian conversations about the topic, but also the inclusion of the entirety of the teaching academy. It also provides a deeper understanding of the theoretical underpinnings of the Association of College and Resources Libraries' *Framework for Information Literacy for Higher Education*, as metaliteracy also focuses on students' ability to obtain a deeper, irreversible understanding of information's interaction in their lives. This book will be particularly useful for librarians who are interested in information literacy as it relates to digital content and searching for guidance in integrating information literacy into social media discussion and instruction. Librarians and non-library faculty involved in instruction at all levels will also find it useful.—*Elizabeth White, Research and Instruction Librarian, University of Georgia, Athens, Georgia*

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Correspondence concerning these reviews should be addressed to "Reference Sources" editor, Anita J. Slack, Liaison and Instruction Librarian, Capital University 1 College and Main Columbus, OH 43209 email: aslack8@capital.edu. Astrology Through History: Interpreting the Stars from Ancient Mesopotamia to the Present. Edited by William F. Burns. Santa Barbara, CA: ABC-CLIO, 2018. 401 pages. Acid-free \$94 (ISBN 978-1-4408-5121-1), call for pricing.

This work differs from most existing reference works about astrology in two significant ways. First, as the title suggests, the focus is historical, tracing significant developments in astrology from ancient times to present and in a variety of cultures. Second, this work approaches astrology from a standpoint that is neither skeptical nor apologetic. The work would be as interesting to the critical skeptic as to the enthusiastic adherent. This work is an exploration of human attempts to find meaning in the heavenly bodies we observe in the sky.

The single volume contains 115 essays that are usually 2–3 pages in length. The essays are signed and provide "see also" references and useful bibliographies for further reading. Many of the essays are biographical. Some examples of biographical topics are "Evangeline Adams," "Pythagoras of Samos," "Carl G. Jung," and "Bangalore Venkata Raman." Some other topics include information related to the skies, such as "Fixed Stars"; astrology in times and places, such as "Mesoamerican Astrology"; astrology in society topics, such as "Court Astrologers"; astrological terms and tools, such as "Hamburg School of Astrology"; and a discussion of astrology and media, such as "Indian Cinema."

Articles are clearly written with the layperson in mind and are quite readable, yet they are also obviously informed by scholarship. Contributors regularly refer to primary sources, define jargon, and place the topics in context. Particularly informative is the five-page introduction written by Burns and the timeline that follows. These provide a concise flyover to the history of astrology that draws one into the rest of the work.

The work includes a small number of grayscale photographs and reproduced artwork. It has an extensive index. The cover is an attractive hardback featuring a time-lapse photograph of stars above Stonehenge.

Astrology Through History is interesting and readable enough to find its place in a browsing collection, and informative enough to find itself in a reference collection. It would fit well in high school, public, and academic libraries. —Steven R. Edscorn, Executive Director of Libraries, Northeastern State University, Tahlequah, Oklahoma

The Bathroom: A Social History of Cleanliness and the Body. By Alison K. Hougland. Santa Barbara, CA: Greenwood, 2018. 192 pages. Acid free \$39.00 (ISBN 978-1-4408-5266-4). Ebook Available (978-1-4408-5267-1), call for pricing.

Alison Hoagland has written a thought-provoking book on the history of the smallest room in the house that no one talks about. *The Bathroom: A Social History of Cleanliness and the Body*, delves into the history, evolution, psychology, and socioeconomic implications of the American bathroom

and its development from the Civil War onwards. She demonstrates how much of the discourse around cleanliness, sanitation, consumerism, and technology has come to be centered on the bathroom in the United States, and discusses the many forms this takes in advertising, public health, and urban and rural infrastructure.

The book begins with a brief overview of the history of the bathroom, from its earliest appearance in China and the Indus Valley through the Roman period and the Middle Ages to the mid-nineteenth century. In the following chapters, she traces the evolution of the American bathroom through different themes such as sanitation, technology, privacy, inequality, and personal care. Through each chapter she describes how the bathroom revealed how Americans perceived issues such as privacy, cleanliness, and personal autonomy, and evolved from a luxury of the rich to a staple of the middle class to a public health necessity for all. The book is jammed with interesting tidbits, for example, that Baltimore was the last major city to build a sewage system, and that the rise of modern-day advertising can be traced to early efforts by soap companies to sell their products. A chronology and glossary help define terms and set the historical context, and a rich bibliography is included for those who wish to delve deeper into the subject. Photographs judiciously used throughout the text and an index round out this compact little volume.

This is the first scholarly work devoted to the American bathroom, and it is a fascinating read. A part of Greenwood's History of Human Spaces series, it is an affordable and wellresearched volume that should find a home in every library, but would be particularly useful for college and university libraries with architecture, sociology, anthropology, or public health researchers.—*Amanda K. Sprochi, Health Sciences Cataloger, The University of Missouri, Columbia, Missouri*

The Bizarre World of Reality Television. Edited by Stuart Lenig. Santa Barbara, CA: Greenwood, 2017. 332 pages. \$89 (ISBN 978-1-4408-3854-5). Ebook Available (978-1-4408-3588-2), call for pricing.

The Bizarre World of Reality Television explores the origins, rapid progression, and quirky contents of reality television programming. Written by Stuart Lenig (Columbia State Community College), this unique and compact work is an entertaining read that dissects reality television through a post-modernistic lens, detailing the economic, cultural, and social factors.

The work chronicles more than 100 important reality television shows from the medium's early beginnings with *An American Family, Star Search,* and *That's Incredible*! to current and long-running shows such as *The Bachelor* and *American Idol.* Television personalities such as Anthony Bourdain and Bethenny Frankel, as well as significant television channels (HGTV and TLC) are also highlighted. The scope of the book is somewhat limited and it is not intended to provide comprehensive coverage of reality television.

Still, it fills a hole in reference sources that delve into this aspect of media.

Lenig organizes the entries across five chapters and begins each chapter with an introductory essay that provides background analysis for each type of reality television program examined. The chapters cover self-improvement and home transformation shows; competition and talent shows; personal lives; dating and matchmaking shows; and international reality television programs. Each entry provides a program history and synopsis, reasons for the show's popularity, cross-references, and a further readings bibliography. Lenig ends the book with a concluding essay about the future of reality television, bibliography, and a useful index.

Bizarre World is recommended for public libraries and academic libraries with programs in popular culture, media studies, and sociology.—*Colleen Lougen, Serials and Electronic Resources Librarian, SUNY New Paltz*

Black Lives Matter: From a Moment to a Movement. By Laurie Collier Hillstrom. Santa Barbara, CA: Greenwood, 2018. 164 pages. Acid-free \$39 (ISBN 978-1-4408-6570-1). E-book Available (978-1-4408-6571-8), call for pricing.

The Black Lives Matter movement began as a social media hashtag (#BlackLivesMatter) by Alicia Garza, Patrisse Cullers, and Opal Tometi to bring awareness when George Zimmerman was acquitted in the fatal shooting of Tayvon Martin in 2012. It gained momentum in 2014 after the police shooting of Michael Brown in Ferguson, Missouri, with nationwide protests against the growing pattern of police-involved shootings of unarmed African American men. Social media has allowed the movement to organically grow by sharing videos, observations, and information.

This book is well researched and documented. It is a factual account of the people, places, and events of the Black Lives Matter movement. This book correctly situates the Black Lives Matter movement within the long history of racism in America. At 164 pages, this is not a long book, which is appropriate based on the relative newness of the formal Black Lives Matter movement. This length and the relatively small physical size of the book (6" x 9") is conducive to student checkout.

Without question, the book reflects that the Black Lives Matter movement is about people. The primary documents section is primarily speeches by New York Mayor Bill de Blasio, Eric Holder, and other officials after the investigations of police shootings of African American men. There is one intelligence report from the FBI. This section needed a brief introduction for context. The biographical sketches section provides good information on the people involved in the Black Lives Matter movement. This is a good starting point for students who want to do further research. The index emphasizes people involved in the Black Lives Matter movement. The timeline is an excellent overview of important topics in racism with good detail of the incidents within the Black Lives Matter movement. There is strong documentation in each chapter and a useful annotated bibliography in the back matter.

There is one other similar book, *The Making of Black Lives Matter: A Brief History of an Idea* (Oxford University Press, 2007) by Christopher J. LeBron. LeBron's book focuses on how to address the problem of racism; *Black Lives Matter: From a Moment to a Movement* factually documents the history and origin of the movement. The only other similar information about this topic is found online.

This book creates a clear, permanent source for the Black Lives Matter movement to situate it in the long history of racism in America. This is especially important since the movement has been primarily documented on webpages and social media, which can be deleted or moved at any time. It is appropriate for high school and university libraries as a secondary source or to encourage further research on the Internet.—*Terry Darr, Library Director, Loyola Blakefield, Towson, Maryland*

Epidemics and War: The Impact of Disease on Major Conflicts in History. Edited by Rebecca M. Seaman. Santa Barbara, CA: ABC-CLIO, 2018. 340 pages. Acid-free \$94 (ISBN 978-1-4408-5224-4). Ebook Available (978-1-4408-5225-1), call for pricing.

This book is filled with interesting information about an important topic that has received scant attention in modern times, but how it should be used and who should buy it is difficult to judge.

The format is a bit of a mash-up. The coverage is not comprehensive, at least when it comes to all wars. Instead, diseases are presented individually in a series of essays about conflict in certain times and places, arranged in roughly chronological order.

The Battle of Bosworth frames a chapter about sweating sickness. Napoleon's invasion of Russia is the connection to typhus. Even mumps makes an appearance as the focus of the chapter on the modern Bosnian war. The upshot is a reader learns a lot about the links between the given violence and the given disease, but less about how numerous diseases affected a particular war, or how a certain disease affected many wars.

Although the war and epidemics theme was pursued by early twentieth-century authors, the closest recent parallel to this volume may be Matthew Smallman-Raynor and Andrew D. Cliff's War Epidemics: An Historical Geography of Infectious Diseases in Military Conflict and Civil Strife, 1850–2000 (Oxford, 2004). While this reviewer does not have access to this title, according to an online review at MedGenMed (https://www .ncbi.nlm.nih.gov/pmc/articles/PMC1681368/), the authors use "epidemiologic organizational methods and sophisticated biostatistical modeling [to] describe and analyze hundreds of major conflicts and their attendant sequelae in meticulous detail." That work also features numerous graphic elements; the Seaman work has none.

Two twenty-first-century resources that touch on military

matters in specific entries but are essentially about epidemics are Mary Ellen Snodgrass's *World Epidemics: A Cultural Chronology of Disease from Prehistory to the Era of SARS* (McFarland, 2003) and the third edition of George Childs Kohn and Dr. Mary-Louise Scully's *Encyclopedia of Plague and Pestilence: From Ancient Times to the Present* (Facts On File, 2008).

Each chapter in *Epidemics and War* includes endnotes, and there's a lengthy bibliography in the back, along with notes about contributors and an index. Yet, as opposed to a reference book, this volume seems more useful as something to read cover to cover for those interested in either warfare or epidemics—or historical research. In fact, the editor opens and concludes the text with short essays about the challenges of such research on this topic. The book deserves a place in academic libraries and perhaps in large public libraries that give special attention to either military or medical history.—*Evan Davis, Librarian, Allen County Public Library, Fort Wayne, Indiana*

Hammer Complete: The Films, the Personnel, the Company. By Howard Maxford. Jefferson, NC: McFarland, 2019. 992 pages. \$95 (ISBN 978-1-4766-7007-2). Ebook Available (978-1-4766-2914-8), call for pricing.

Imagine that you are the most devoted fan of your favorite thing, be it NASCAR, collecting salt and pepper shakers, or birdwatching. From childhood on, your interest in the minutiae regarding the subject of your fandom only grows. Eventually, your dream comes true, and you write an encyclopedia about your favorite subject. This scenario seems likely as this reviewer considers how Howard Maxford's *Hammer Complete: The Films, the Personnel, the Company* came into being.

Hammer Productions was a British film company formed in 1934 that is most famous for its gothic horror films in the 1950s and 1960s. Through various iterations, the company produced around 150 films and several television series.

The book has a jocular introduction—in fact, it's called "My Life with Hammer—A Rather Rambling Introduction"—and details the author's relationship with Hammer films in particular from the age of 12 onward. Maxford tells us that his previous book about Hammer (*Hammer, House of Horror: Behind the Screams*, Batsford, 1996) just skimmed the surface, and he sought to correct that with this book. Maxford writes, "This second volume, I was determined, would simply overflow with facts and figures, quotes from my own various Hammer-related interviews (including previously unpublished material), and anecdotes from other sources, including biographies, autobiographies, DVD and Blu-ray commentaries, magazines, newspapers and studio histories, etc. [in] an all-encompassing A-Z of the studio (which hadn't been done before)" (3). Maxford has certainly met his goal.

To say that Maxford is enthusiastic about his subject would be an understatement. He has left no stone unturned. In fact, he turned each stone and then wrote a few entries about what he found underneath. This reviewer is confident

that there is no better place to find information on Hammer films than this book. (However, is it possible to have too much information about a subject? Each uncredited harem girl, each clapper loader, and each third assistant carpenter has an entry here). There is also an appendix that lists the films that never made it to production, a well-sourced notes section, and a bibliography. For all of the details, a simple filmography would have been a great addition for the non-Hammerphiles among us.

This effusively thorough, physically giant encyclopedia isn't for everyone, but would make a good addition to a library at a college or university that offers a film program.—Tracy Carr, Library Services Director, Mississippi Library Commission, Jackson, Mississippi

Hatred of America's Presidents: Personal Attacks on the White House from Washington to Trump. Edited by Lori Cox Han. Santa Barbara, CA: ABC-CLIO, 2018. 396 pages. Acid-free \$94 (ISBN 978-1-4408-5436-1). Ebook Available (978-1-4408-5437-8), call for pricing.

Books on the greatness of American presidents fill America's bookstore shelves. However, this work focuses instead on the hatred and opposition that each president faced. It sets itself apart from a book like *The American President: A Complete History* (by Kathryn Moore), which covers the national and world events of each president's term, but does not necessarily cover the backlash presidents receive in response to those events. Many books focus on assassinations of presidents, but they do not typically include additional information about every president's term, as this one does.

This volume includes contextual information such as public opinions, political oppositions, and the relationship between the president and the press. This focus provides a very different aspect of the man in office at that time, something other books are often not able to do. The editor of the book has also given the reader a definition to standardize the application of hate/hatred: "intense dislike or hostility directed at someone or something, includes the synonyms such as loathing, aversion, animosity, or ill will" (xi), and each author wrote with this definition in mind.

Hatred of America's Presidents was inspired by a statement made by President Trump in 2017 in which he declared, "No politician in history . . . has been treated worse or more unfairly" (ix). The editor does acknowledge that it is hard to be objective in today's hyper-partisan political environment, but he inquires about how such a thing could be measured and whether Trump's statement would stand up to history.

As the title would suggest, this work focuses on the criticism of each president. The book includes an introduction and is formatted with one chapter per president, written by an expert on that particular president or historical period. The chapters do vary in tone because various individuals have written them, but also because the circumstances of each presidential term are so different in terms of opinion polls, political rivals, the relationship with the press, and the personality of the president. Other contextual information includes new historical developments such as political parties' machines, the religious right, and political action committees that would mail or email propaganda directly to the people.

The target audience for this book is hard to pinpoint, but it would be useful as a resource to read a few chapters for a class or for personal understanding. The writing is reminiscent of a college textbook, with further readings suggested at the end of each chapter. It provides a collection of unique facts that fills a void in the genre. Librarians collecting for colleges, universities, and large public libraries would find it useful for their political science and history collections.—Susan Elkins, Digital Resources Librarian, Sam Houston State University, Huntsville, Texas

Holidays Around the World. 6th Ed. By Pearline Jaikumar. Detroit, MI: Omnigraphics, 2018. 1,528 pages. Acid-free \$177 (ISBN 978-0-7808-1619-0). Ebook Available (978-0-7808-1658-9), call for pricing.

"I have to write a paper about Eka Dasa Rudra," explains the teenager who has just approached the reference desk. Talk about out-of-the-blue! "How did you hear about him?," you ask. The student explains that it isn't a person. It's a gathering involving hundreds of thousands of people that happens once every hundred years. Where? The student doesn't know. "Oh wait, someplace where there are volcanoes," she says. With a little more prompting, the student explains that the gathering takes place at a temple which was built on the slopes of a volcano. Luckily, you had the foresight to order a copy of Holidays Around the World because your hunch that this just might be some obscure religious observance proves correct. With the help of this directory, researchers may obtain interesting background information about all kinds of holidays and celebrations in all fifty US states and in more than 100 countries. Each entry provides information on that holiday's origins and cultural or religious context, as well as a brief list of organizations to contact for further information.

There is a comparable directory, Holiday Symbols and Customs (Omnigraphics, 2009), which covers fewer holidays but provides more depth. It's also a more readable source with headings as well as key words in bold type. In terms of organization, the user will find the same indexes and appendixes in both sources. The subject index is divided into subsections. For example, if I wanted to learn about Judaism, I could use the religion subcategory, where I would find four holidays associated with the Jewish faith. Using the chronological index, you can get some idea of what to do on your vacation. For example, I see that there is a film festival going on in Atlanta during April. Flipping to the appendix for tourism information sources, I now have the contact information for the Atlanta Convention and Visitors Bureau. That's all well and good, but most of us would go online first, turning to a printed directory for tourism information second.

This directory is a recommended reference source for

public and academic libraries, wherever people are interested in learning about different cultures, despite the fact that the appendixes could have been omitted without any great loss.—Dana M. Lucisano, Reference Librarian, Silas Bronson Library, Waterbury, Connecticut

Hollywood Heroines: The Most Influential Women in Film History. Edited by Laura L. S. Bauer. Santa Barbara, CA: Greenwood, 2018. 407 pages. Acid-free \$94 (ISBN 978-1-4408-3648-0). Ebook available (978-1-4408-3649-7), call for pricing.

Covering film history from the silent era to the present day, Laura L. S. Bauer (doctoral student in Claremont College's English department) and a team of scholars and industry professionals have created a timely and valuable resource that "highlights the contributions exceptional women have made throughout the history of Hollywood cinema in every major occupation of filmmaking" (xiv).

The table of contents includes entries on actresses, casting directors, cinematographers, costume designers, directors, editors, writers, producers, studio heads, and other varied specialty occupations within the motion picture industry. Entries focus on the professional lives of the women; primarily on the quality and impact of the work these women performed and the historical contexts in which they existed. A bonus feature is the incisive interviews of contemporary women who have made their mark in their respective fields. These reflections regarding the inner workings of the motion picture industry touch on issues of gender inequality, racism, and ageism, as well as the personal satisfaction of making a difference in an industry still dominated by a white male power structure. A further-reading list helpfully suggests other books (when available) and quality online articles. Approximately three dozen photographs illustrate the work. A comprehensive index concludes the volume, with page numbers in bold indicating a significant entry. Due to the physical constraints of it being a single volume resource, many women deserving recognition could not be included, and Bauer acknowledges this. As a partial remedy, there is an appendix listing "more influential women in Hollywood." It is perhaps amusing to note that Joan Crawford is relegated to this list, which certainly would have pleased her rival Bette Davis, who is included in the first tier of influential actresses. Possibly taken into consideration was the fact that Davis was the first female president of the Academy of Motion Picture Arts and Sciences, and the first woman presented with the American Film Institute's Lifetime Achievement Award.

No other up-to-date single volume encyclopedia with this scope currently exists, so the convenience, relevance, and moderate pricing of this resource make it a good addition for institutions with media studies programs, particularly those that emphasize gender studies.—*Robin Imhof, Humanities Librarian, University of the Pacific, Stockton, California* *The Holocaust: An Encyclopedia and Document Collection.* Edited by Paul R. Bartrop and Michael Dickerman. Santa Barbara, CA: ABC-CLIO, 2017. 4 vols. Acid-free \$435 (ISBN 978-1-4408-4083-8). Ebook Available (978-1-4408-4084-5), call for pricing.

This is perhaps one of the more sizeable and useful Holocaust reference titles this reviewer has come across. Complete with two volumes of A–Z entries and two volumes of supplementary primary source material ("Testimonies" and "Documents"), editors Bartrop and Dickerman have assembled a noteworthy resource for beginning research on a wide range of Holocaust-related topics.

Volume 1 begins with a preface, historical introduction, and three maps to acquaint the reader with the size and scope of the reference set. Next comes a section of essays, which really reads more like a single essay divided into sections, addressing subtopics such as "Causes," "Perpetrators," "Victims," and "International Reactions." The main reference entries that follow cover an extensive span of people, places, key events, groups and organizations, laws, etc., pertaining to the Holocaust. Entries are cross referenced ("see also") and contain further reading suggestions. Volume 2 concludes with a chronology of events, glossary, and comprehensive bibliography.

Volume 3 opens with a list of testimony entries (110 in total), first alphabetically, then clustered by topic (i.e., "Before the War," "Concentration Camps and Prisons," "Evading Persecution," etc.). Testimonies are excerpted from larger autobiographical works or other primary sources. They are each set up with the original source citation and contextualized with a brief introduction. Finally, volume 4 contains documents of the Holocaust (177 in total) organized chronologically under topic headings (i.e., "The Othering of Jews," "Genocide," and "Responses and Other Victims," etc.). While some of these are excerpts taken from larger works, most of the documents such as laws/decrees, telegrams, and other correspondence are reproduced in their entirety.

More and more reference sets are being published in this format (A–Z entries, followed by substantial sections of primary sources), which this reviewer sees as a great thing. Two other Holocaust encyclopedias come to mind when reviewing this title: *The Encyclopedia of the Holocaust* (Macmillan, 1990) and *The Holocaust Encyclopedia* (Yale University Press, 2001). Both are fine sources with similar content and scope in terms of reference entries, but lacking the additional documents.

This set would be a welcome addition to any academic library serving students at the undergraduate level. It would be great for generating research topic ideas and equipping students with primary sources that are requisite of most any history paper at the college level.—*Todd J. Wiebe, Head* of Research and Instruction, Van Wylen Library, Hope College, Holland, Michigan

The Kurds: An Encyclopedia of Life, Culture, and Society. Edited by Sebastian Maisel. Santa Barbara, CA: ABC-CLIO, 2018. 376 pages. Acid-free \$94. (ISBN 978-1-4408-4256-6). Ebook Available (978-1-4408-4257-3), call for pricing.

The Kurds: An Encyclopedia of Life, Culture, and Society is a single-volume resource that attempts to fill the gap in Southwestern Asian literature of comprehensive, critical, and timely information specific to the Kurdish people. The Kurds are a stateless minority split among Iran, Iraq, Turkey, and Syria, as well as other nations in the wider diasporic community. A multidisciplinary team of scholars and researchers have divided chapters regarding the historical, sociocultural, and political contexts of the Kurdish people's struggle into three sections.

"Part I: Thematic Essays" provides an overview of the internal and external tensions that shape Kurdish politics, society, and culture across different states. While broad, these sections (including "Origins and History," "Geography," "Language, and "Life and Work") will assist beginning researchers looking for manageable and discipline-specific points of entry into Kurdish life. For the most part, these brief, accessible, and nuanced essays avoid the easy essentialism that often plagues sociocultural encyclopedias, and a commitment to political and ideological contexts underlying these subjects adds critical rigor beneficial to the beginning researcher. A salient example is Weiss's chapter regarding gender roles, which provides a succinct yet rigorous analysis of changing gender norms in Kurdish culture along with a brief primer to contemporary gender theory. Though readable in isolation, each chapter builds on the information of prior essays, and the committed reader benefits from a linear approach to this section.

"Part II: Country Profiles" explores the relationship between the Kurds and their nations of origin, nations with prominent diasporic Kurdish communities, and the countries with military involvement in the Kurdish region of origin. Some chapters also provide state-specific supplements to the broader overviews of the first section regarding history, literature, and politics in the nation.

"Part III: Documents" provides selected primary sources, including songs, poems, and political documents. Brief introductions to these materials provide political and cultural context for their relevance.

Each section includes parenthetical citations as well as a bibliography for further reading. A reader who might not wish to engage with this volume linearly benefits from an index, table of contents, glossary, preface, and introduction, the last of which provides the reader with a sense of political urgency that contextualizes the objectives intrinsic to the rest of the volume. *The Kurds: An Encyclopedia of Life, Culture, and Society* is recommended for academic and public library collections as a rich, critical supplement to this research area.—Lydia Brambila, Remote Reference Assistant, University of Georgia Libraries, Athens, Georgia *Pakistan: The Taliban, Al Qaeda, and the Rise of Terrorism.* By William J. Topich. Praeger Security International. Santa Barbara, CA: Praeger, 2018. 217 pages. Acid-free \$75 (ISBN 978-1-4408-3760-9). Ebook Available (978-1-4408-3761-6), call for pricing.

One might be tempted to add this title to their collection as a much needed update on two important topics of scholarship—Pakistan and terrorism. However, the book falls short in its attempt to document "Pakistan's troubled history" (promotional flyer).

As a tertiary source, one would expect a factual approach to the material, but charged language abounds. For instance, in the introductory paragraph alone the author mentions "Pakistani paranoia" and the "artificial nature of the country" (vii). There are also both factual and editorial errors with examples of both appearing on the first page. The author states that Pakistan is "the world's fifth largest and populous country" which is true in terms of the population but certainly not in terms of geography. On the editorial side, a sentence reads "the future of Pakistan hinders on the ability of the fragile government structure to control and ultimately eradicate the terrorist threat within its borders." On its face, the structure of the book is fairly straightforward, relying primarily on chronology. However, chapters are not introduced clearly and end abruptly with no overall conclusion. The writing is also confusing. This title is part of the Praeger Security International series. The series description includes the claim that its titles are "written by subject experts and well-known researchers" (https://www.abc-clio.com/ABC-CLIOCorporate/product .aspx?pc=A4747C). Author William J. Topich earned an M.A. in an unspecified discipline and is the US Social Science chair and teacher at a preparatory school. He developed an interest in Pakistan during a trip he took in 2010.

For an up-to-date (in terms of reference sources) and expert overview of Pakistan, the *Europa World Year Book* (Routledge, published annually) provides an excellent treatment that includes information about terrorism complete with robust and necessary context. CountryWatch profiles provide more in-depth information for those who subscribe to the database. Finally, the *Historical Dictionary of Pakistan* (Rowan and Littlefield, 2015), while not as current, is an also excellent reference work. *Pakistan: The Taliban, Al Qaeda, and the Rise of Terrorism* is not recommended.—*Anne C. Deutsch, Instruction Program Coordinator, Sojourner Truth Library, State* University of New York at New Paltz, New Paltz, New York

The State of American Policing: Psychology, Behavior, Problems, and Solutions. By David J. Thomas, PhD, LMHC, Foreword by Jim Bueermann. Santa Barbara, CA: Praeger, 2018. 210 pages. Acid-free \$48. (ISBN 978-1-4408-6006-5). Ebook Available (978-1-4408-6007-2), call for pricing.

The State of American Policing: Psychology, Behavior, Problems, and Solutions by David J. Thomas observes the past and current roles of police in the United States. The purpose of this book is to closely examine the impact of policing minority members of the community and address recent instances of police use of deadly force. The author, David J. Thomas, provides expert perspective on policing with his background as a veteran police officer and criminal justice professor at Florida Gulf Coast University.

While there have been several reference works published in recent years on policing and use of force, not many have focused primarily on the minority perspective quite like *The State of American Policing: Psychology, Behavior, Problems, and Solutions.* Many of the other available books on American policing rarely include more than a chapter on police interaction with minorities and diverse communities. Current reference works on policing also tend to highlight recent police controversies and community responses such as the Black Lives Matter movement. A similar resource would be *The Use and Abuse of Police Power in America: Historical Milestones and Current Controversies* (ABC-CLIO, 2017) because it also describes police-involved shootings that have recently ignited controversy in America.

Along with a concise history of policing in America, the author includes several hypothetical scenarios of police interactions with the community. These scenarios provide the reader with questions that analyze a problematic policing situation which is followed by a demonstration of the correct solution. The book also includes real case studies of police interactions with minority groups highlighting misconduct by public servants. David J. Thomas also provides great insight into police officers' experiences and attitudes as they deal with the public. The book addresses the psychology of police bias and racial attitudes along with their decision process and factors that can potentially result in the use of deadly force. The State of American Policing: Psychology, Behavior, Problems, and Solutions describes modern policing as an ever changing occupation and offers solutions for law enforcement agencies to avoid conflict with the people they serve.

The State of American Policing: Psychology, Behavior, Problems, and Solutions by David J. Thomas provides an intelligent study of modern-day policing with a strong emphasis on law enforcement and minority interactions. With a unique perspective and a controversial subject matter, this reference work would make a fine addition to criminology and criminal justice collections.—Trent Shotwell, Special Collections and Archives Librarian, Sam Houston State University, Huntsville, Texas

Steroids and Doping in Sports: A Reference Handbook, 2nd Edition. By David E. Newton. Contemporary World Issues. Santa Barbara, CA: ABC-CLO, 2018. 354 pages. Acid-free \$60 (ISBN 978-1-4408-5481-1). Ebook Available (978-1-4408-5482-8), call for pricing.

This volume is part of a series titled "Contemporary World Issues." The series focuses on issues in society, such as gun control, pollution, human trafficking, and the death penalty. The first edition of *Steroids and Doping in Sports* was published in 2014, "just prior to the release of the most serious revelations about the use of performance-enhancing drugs in amateur and professional sports" (xiv). The author decided the time was right to update the resource with additional information and current statistical data. The preface outlines which chapters were updated but does not go into detail on what new information was added or changed.

The volume starts with the background and history of performance-enhancing drugs and weaves in a tragic story of a high school student dying from steroid use. This chapter goes into detail about testosterone and its effect on the body. It discusses the uses and risks with anabolic steroids and how the use has grown so prevalent in sports. Each chapter ends with an extensive list of references. The references do include more recent articles for the second edition.

The second chapter delves into the problems and issues and solutions to the steroid epidemic. It starts with covering doping from 1950 to 1970, discusses the banning of steroid use by the International Olympic Committee and other sports committees, the methods of testing for use and problems associated with testing and how doping became so prevalent in later years. New to this chapter from the first edition is information about doping in horse racing.

Chapter 3 provides essays from guest authors. Many of the authors are the same as the first edition but have updated their essays. A few essays are new to the second edition. The perspectives cover topics such as steroids and body image, cheating in horse racing, doping in high school sports, and the politicization of steroid use.

Chapter 4 lists profiles of people and organizations involved in the issue such as Barry Bonds, Floyd Landis (but not Lance Armstrong), George J. Mitchell, and the National Institute on Drug Abuse. There are only a couple of new profiles here from the first edition.

Chapter 5 lists data and documents such as rules, regulations, and law cases. Chapter 6 lists extensive, annotated resources and chapter 7 provides a glossary. There is an index.

The introduction to the series says these titles "provide a good starting point for research by high school and college students, scholars and general readers" (iii). This book is an excellent introduction to the topic of steroids and doping in sports. However, there is not enough new information in the second edition to warrant purchasing it again if a library already owns the first edition.—*Stacey Marien, Acquisitions Librarian, American University, Washington, DC*