

Exploring Virtual Pathways: Understanding Student Engagement in an Asynchronous e-text on Library Spaces, Services, and Research

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abstract: This study evaluates the effectiveness of an asynchronous e-text, *Library 101*, in teaching students about library resources and services. Developed in a collaboration between the eLearning librarian and Center for Innovation in Teaching and Learning (CITL) at the University of Illinois Urbana Champaign, the *Library 101* e-text introduces essential library resources to users regardless of previous library knowledge. The responses from a user survey revealed high satisfaction and a desire for a deeper understanding of the library. The findings highlight the value of digital learning materials in addressing educational gaps and empowering students to utilize library services effectively.

Introduction

Libraries play a transformative role in the academic environment of colleges and universities, fostering student success in all dimensions. Library instruction, in particular, plays a pivotal role in empowering student success within higher education. The impact of library instruction extends beyond academic performance, encompassing student retention, personal and professional development, inclusivity, community engagement, access to research, and essential student support.¹

Traditional library instruction methods, such as one-shot library sessions, in-person workshops, and library orientation sessions, are often the primary means of deliver-

portal: *Libraries and the Academy*, Vol. 25, No. 3 (2025), pp. 509–526.

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ing information literacy. However, these methods often fail to fully address the varied demands of students and instructors. Demands on time (both for the librarian and the courses they wish to visit) are one of the most prominent challenges instruction librarians face. Class instructors may feel they do not have enough time in the semester for a library instruction session and, therefore, choose not to incorporate it into their syllabi and schedules. Instructors who incorporate such sessions typically provide librarians with insufficient class time to convey important information. Similarly, librarians are often overburdened and cannot always teach in every class, particularly at large institutions. Nicole Pagowsky challenges the traditional one-shot model and asks how we can engage in “critical investigation and reflection about how librarians engage in teaching—in relation to, and also beyond, the one-shot mode” in her article, “Critique as Care: Disrupting Narratives of the One-Shot Instruction Model Introduction.”² In this way, online learning modules can provide flexibility and depth, potentially allowing students to interact with and revisit content as they need, thus disrupting the traditional one-shot model.

To address these challenges, librarians have utilized online teaching tools such as Springshare products, including Libguides and LibWizard, or standalone eLearning course design software, such as Articulate Rise and Storyline. Librarians have also used their universities’ learning management systems (LMS), such as Canvas, Moodle, or Blackboard, to create interactive library tutorials to supplement in-class library instruction. However, often the LMS requires that students be enrolled in a course in which the instructor has either imported a library module or that has an embedded librarian.

This article describes the development and implementation of a library instruction e-text outside the campus’s LMS on the University of Illinois etext platform (see <https://citl.illinois.edu/our-services/etext>). The authors

The interactive e-text provides convenient access to library information asynchronously, enabling students to learn about the library independently, without being enrolled in a course that offers library instruction.

address the need for the e-text, delve into the development process, outline the content included in the module, and assess its effectiveness. The study evaluates the effectiveness of an asynchronous e-text, called *Library 101*, in teaching students about library resources and services. The interactive e-text provides convenient access to library information asynchronously, enabling students to learn about the library independently, without being enrolled in a course that offers library instruction. Moreover, the e-text provides students with ongoing access to the information so that students can revisit the e-text throughout their college careers. The study’s findings show

that most students who completed the library e-text found it beneficial and welcomed the opportunity to learn about library resources in this format.



Literature Review

This literature review explores the role and effectiveness of using asynchronous learning tools to enhance students' understanding of the library. Integrating asynchronous learning tools in library instruction has gained significant traction over the years. Digital learning objects (DLOs) such as learning management systems (LMS), video tutorials, and self-paced modules are now widely recognized as effective strategies for enhancing students' understanding of library resources and promoting information literacy. These tools allow students to engage with materials at their own pace and revisit content as needed, addressing the growing demand for adaptable and accessible learning environments.

Although DLOs offer significant advantages in promoting flexible and accessible learning, libraries still primarily teach library instruction and information literacy through the traditional in-person, one-shot model. The challenges and limitations of the conventional library instruction model have been the subject of extensive research and analysis within the library community. Karen P. Nicholson writes about the one-shot approach, "The library and information science (LIS) literature is replete with discussions of the pedagogical weaknesses and practical constraints of this approach, yet it remains the dominant model for information literacy instruction in North American higher education nonetheless."³

Integrating online library modules can significantly alleviate librarians' instructional burden. At Appalachian State University, two librarians detail their approach to developing online modules for the information literacy component of a first-year seminar. Using these modules, they could effectively reach 3,000 students, which would be impossible if traditional instructional methods were used.⁴ Like Appalachian State University, the University of Central Florida developed a suite of online learning tutorials to help ease the instructional burden on librarians and foster sustainable teaching.⁵ In another example, health science librarians at the University of Southern California created an online orientation tutorial for their various health science programs to help lighten their instruction load.⁶

Numerous studies have also documented the successful use of online learning resources to promote information literacy and library instruction to students. These studies have shown success regardless of whether modules were synchronous, asynchronous, or flipped classroom and, in many cases, regardless of the platforms used. A notable example of an instruction program was developed by Northeastern University Library to provide library instruction to their first-year engineering program. As it expanded and adapted in response to the COVID-19 pandemic, this program successfully incorporated online flipped classroom modules to enhance student engagement and reduce the workload on librarians.⁷ Surveys of students and instructors at Northeastern University confirmed the usefulness of this program. Instructors saw a marked increase in the quality of students' assignments after the instruction program was implemented.⁸ Yet another example of a successful program was at the University of British Columbia's Okanagan Library, which saw a partnership formed between the chemistry librarian, the library, and multiple campus partners to create a series of scaffolded online learning resources to support chemistry students throughout their time at the university.⁹



The author also looked at research that explored the use of learning management systems, like Canvas, Blackboard, and Moodle, as a convenient platform for making instructional materials available and facilitating communication with students both in the traditional classroom setting and outside of it. Meredith Gorran Farkas notes that LMS systems are frequently strategically employed in face-to-face and hybrid classes. She writes, “Learning Management Systems are now frequently used in face-to-face and hybrid (partially online) classes as well, as the features provide a convenient space to make materials available and communicate with students outside of the face-to-face environment.”¹⁰ Librarians increasingly use platforms like Springshare’s LibGuides through LTI (Learning Tools Interoperability) integrations within popular LMS platforms like Canvas. Several studies highlight the effectiveness of these integrations in providing seamless access to library resources with the LMS that students use daily.¹¹

Many scholars argue for supplementing or replacing traditional, in-person library one-shot classes with more comprehensive e-learning tools.¹² The integration of asynchronous learning modules within LMSs not only addresses these challenges but also enhances the overall effectiveness of library instruction by providing continuous access to learning materials and fostering ongoing student engagement.¹³

The literature supports that adopting asynchronous learning tools in library instruction demonstrates significant potential in improving student outcomes and promoting information literacy. These tools can also complement in-person instruction and help foster a more inclusive and effective learning environment. Studies also confirm that students value online instruction for its flexibility and the ability to review materials as needed.¹⁴

Setting

The current surge in online learning, greatly accelerated by the pandemic—with digital teaching and learning tools and platforms assuming a central role in pedagogy—underscores a transformative shift in educational patterns. The National Center for Education, in the Condition of Education 2023 at a Glance Report, disclosed that in the Fall of 2021, 61 percent of students enrolled in college were enrolled in a distance education course. In that same period, 28 percent of distance students were exclusively enrolled online.¹⁵

The author, an eLearning librarian, conducted the study at the University of Illinois Urbana-Champaign, a major R1 land-grant university in the US, which serves over 35,000 undergraduates and houses a university library with 23 branches across the campus. The university library employs approximately 400 staff, including tenured and tenure-track librarians, academic professionals, civil service employees, graduate students, and undergraduates. The Teaching, Learning, and Academic Support Unit (TLAS) manages the primary instruction program, focusing on first-year writing and composition, including rhetoric, English as a Second Language, and composition classes. Librarians and 20 graduate assistants in TLAS teach these courses and collectively conduct around 250 classroom sessions annually. Subject librarians provide discipline-specific instruction. The eLearning librarian, a position within TLAS, is responsible for supporting and coordinating eLearning initiatives across the library and the university.

The trend toward distance education is apparent at the University of Illinois, which offers over 150 online degrees, certificates, and endorsement programs across ten colleges. In academic year 2022, over 3,000 online courses were taught, reaching students across more than 200 countries. The institution's online course program also has a rich history of online programs, with some of the first programs developed in 1995 and 1996 when the School of Information Sciences' online master of library and information science program was founded. The university continues to expand these initiatives with the upcoming online bachelor of liberal studies degree completion program.

As universities expand their online programs to support students, libraries have also faced the challenge of adapting their services to support online learners effectively. At the University of Illinois, students typically receive library instruction through classes with subject librarians or the first-year composition and writing program. However, students can test out of the composition and writing program. Since there is no standardized scaffolded library instruction across the colleges, students often do not receive any library instruction. The first-year writing instruction program offered through the eLearning librarian's unit taught an average of 3,500 first-year students during the 2023–2024 academic school year. The University enrollment for the same year was 6,642, thus 52 percent of the first-year class received library instruction.¹⁶

Teaching Context

The university library uses two primary eLearning learning objects to introduce students to its resources: the General Library Canvas Module and the *Library 101* e-text. The General Library Canvas Module is the foundation for the *Library 101* e-text, providing a comprehensive overview of the library's services and resources. The eLearning librarian developed both the canvas module and e-text using a combination of design tools, information literacy pedagogy, and instructional design that would provide effective asynchronous library instruction. They both introduce students to library resources and provide a foundation for academic research. They were also designed to be interactive and engaging, incorporating multimedia elements such as videos, quizzes, and interactive exercises. Accessibility concerns were addressed throughout both learning objects. Transcripts and captions were added to all media elements.

The Center of Innovation in Teaching and Learning (CITL) supports the broader university in online education, including course development, evaluation, and technology training. It also provides personalized assistance to instructors and helps create creative learning environments. CITL developed a series of free e-texts written by campus faculty called the Skilling Blox as part of its initiatives. The Skilling Blox Series addresses common student success challenges pertaining specifically to undergraduates. This series teaches undergraduates about everyday topics that help them navigate the college experience. Themes in the e-text series include finance, nutrition, and cybersecurity.

The Skilling Blox series is hosted on the eText@Illinois platform, a digital content delivery system specializing in faculty-created, accessible, multimedia-rich textbooks and other digital learning resources. After signing in with their university logins, students can take notes and make highlights that will stay with their book, whether on their desktop, laptop, tablet, or phone. Authors can create engaging content with interactive materials



such as videos, quizzes, and multimedia to enrich the learning experience. The e-Text system and the content are ADA and Title 2 compliant, ensuring the materials are ready for all users regardless of assistive needs from day one.

The Library and CITL have a long-standing partnership. They frequently collaborate on instruction-related projects, online learning, and pedagogical approaches. Thanks to this partnership, CITL was aware of the eLearning librarian's recently developed canvas module, which was used as an example to guide other instructors in leveraging Canvas effectively. Employees at the CITL approached the eLearning librarian with a request to collaborate on a library-focused e-text for the Skilling Blox Series.

The eLearning librarian designed the General Library Resources Canvas module, the precursor to the Skilling Blox e-text, to provide widespread access to library instruction resources through Canvas Commons, a repository for educators to share and find course resources and content. While the platform allows for sharing, it has limitations in tracking user engagement and obtaining feedback. The module's success led to its utilization in 54 courses in its first year. To expand its reach beyond the limitations of Canvas, the eLearning librarian created the Skilling Blox e-text in collaboration with CITL, which ensured accessibility to all university members, not just students.

The e-text was designed to be completed in 45 minutes and consisted of five general library-related topics:

1. *Welcome to the Library* provides introductory information about the physical aspects of the library. This section includes information about how to contact a librarian, what kind of broad support services the library offers, and how to book appointments in the writing center or speaking center. This section also included information on library spaces and hours, emphasizing study spaces and specialized spaces like the reflection room and family rooms.
2. *Discovering Books and Media* focuses on searching for library materials and resources using the library catalog. Additionally, it provides detailed instructions for requesting items the library already owns and explains the procedure for requesting items through interlibrary loan.
3. *Discovering and Accessing Online Sources* introduces students to online resources like e-books, articles, and streaming media. This section teaches students how to effectively use the library's search engine and databases.
4. *Evaluating Sources* teaches students how to conduct college-level research and critically evaluate their discovered resources. This section focuses on distinguishing scholarly sources from non-scholarly sources, and students are introduced to the concept of peer review to assess sources' credibility and reliability.
5. *Understanding Citations* introduces students to the importance of citing sources and attributing information. The section also introduces students to citation managers and gives guidance on how to avoid plagiarism.

The e-text also features several optional "Try Its." The eLearning librarian specifically designed these to engage and encourage readers to practice and reinforce the skills they had learned. These interactive elements are strategically placed throughout the text, which provides readers with opportunities to apply their newfound knowledge.



By including these Try Its, the e-text aims to create a more immersive and interactive learning experience. Readers are no longer passive recipients of information but are involved in the learning process, which solidifies their understanding and retention of the material. The Try Its also provide immediate feedback, enabling readers to assess their progress and identify areas where they needed additional practice.

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The Try Its took various forms. The example here asks students to replicate what they had just been taught by finding a book or article that they would be genuinely interested in. Providing students with prompts for potential searches empowers them to explore the library's resources and available materials. This approach facilitates their understanding of how to engage with library materials and provides insights into the library's collection. A Try It from the Discovering Books and Media module follows:

"You've learned how to navigate the library's catalog. Try replicating the actions shown either in the video tutorial or in the step-by-step search tutorial to find an item in the catalog. You can try searching for:

- Your favorite book
- A journal or book in your major (just type in your major into the search bar)
- Any topic you find interesting (video games, knitting, corgis, oceans, etc.)

Remember to use the filters on the left to tweak your results. Once you've found an item that seems interesting, click on the result to learn a little more about that item. What's something interesting that you found? Share in the space below."

Overall, the incorporation of optional Try Its in the e-text goes beyond the traditional reading experience, transforming the book into a more engaging, interactive, and effective learning tool that facilitates the development and reinforcement of essential skills. e-Text users reported finding the Try Its helpful and confirmed that they allowed the user to explore the library's resources.

Methodology

The eLearning librarian developed a survey to investigate how users interacted with the e-text and to learn about their perceptions of the library. The questions also sought to identify areas of interest and potential improvements regarding the e-text. At the end of the e-text, there is an optional anonymous survey. Since the e-text did not retain student information, there was no need for an IRB. The feedback collected through the survey highlights the significance of such a resource and its utility in promoting students' understanding of the library.

Participants who completed the *Library 101* e-text were invited to give feedback through a series of three questions. Students could choose to answer none, any, or all of the questions. There were no consequences for choosing not to respond. The survey utilized open-ended questions, asking:



1. What aspects of *Library 101* did you enjoy?
2. What additional information about the library would you like to have?
3. What feedback do you have for the *Library 101* team?

The eLearning librarian designed these questions with the intention of gaining insight into user interaction with the e-text and learning about their perceptions of the library.

The eLearning Librarian utilized a mixed-method research approach. Using both qualitative and quantitative methods to provide further depth and context to the survey responses allowed the librarian to develop more nuanced and actionable findings. Given the open-ended nature of the survey responses, the eLearning librarian utilized Atlas.ti to assist with the coding process in this study. Atlas.ti is a qualitative data analysis software used for various types of research. The eLearning librarian entered their data into Atlas.ti and analyzed the responses to find recurring patterns and themes, employing the thematic analysis methodology described in Gerry Ryan and Russell Bernard's article, "Techniques to Identify Themes."¹⁷ The eLearning librarian then organized the responses into six central themes: Experience, Citations and Plagiarism, Library Physical Spaces, Library Research, Library Resources, and Format Features (see Table 1).

The eLearning librarian also identified five responses as "bad data." These responses did not fit into any identified code. All five replies were structured as small essays about topics unrelated to libraries and appeared to be AI-generated.

The eLearning librarian analyzed the frequency of responses to identify recurring themes and looked for nuances to enhance the analysis and better understand the respondents' answers (see Figure 1). An exploration of the coding themes follows:

- *Experience Codes:* To illustrate the nuances within the responses, the eLearning librarian coded for positive, negative, or neutral feedback. In the survey, users mentioned their experiences with the e-text the most across all the questions.
- *Library Physical Spaces Codes:* During the coding process, the eLearning librarian created several codes to highlight what library spaces the students were the most interested in. Students mentioned locating and reserving study rooms.
- *Library Research Codes:* This code focused on research. Users mentioned using the library's website or databases to conduct research.
- *Library Resources Codes:* The library resource codes focused on responses that discussed how to use the library, its collections, and interlibrary loan.
- *Format Features Code:* The format features category only included one additional code. Since the e-text provided video tutorials, the eLearning librarian wanted to determine whether users found them helpful.
- *Citations and Plagiarism Codes:* Users mentioned these themes frequently across all responses; however, there was no need for additional codes to identify nuances within the responses.

Among the 567 users who activated the e-text—defined as logging in through the e-text portal, adding the text to one's library, and subsequently opening it—a total of 321 completed the task, yielding a completion rate of 57 percent. Of the 321 people who completed the e-text, 242 responded to the survey questions at the end of the e-text, producing a response rate of 75 percent. Participants had the freedom to decide which questions to answer.

Table 1.
Survey coding themes

Themed Code	Definition	Examples
Experience	Users mentioned their experience using e-text. Coding reflects positive, negative, and no response.	"None, this was a really great course which taught me a lot about the library and the specific resources offered to [University] students. none, this was great!"
Citation and Plagiarism	Users specifically mentioned citations and plagiarism.	"I appreciated the section about citations and properly using direct quotes and paraphrasing because I know that I will have to use that information in the future and it's good that I know where to find the information if I have questions."
Library Physical Spaces	Users mentioned wanting to know about any library's physical spaces. This mainly includes information about events, study rooms, jobs, and spaces within the library.	"I like that <i>Library 101</i> offered to give quick and brief overview about the libraries on campus and how each collaboratively helps students with research and papers. I like how each library has a unique design and location, but they all offer the same resources to all."
Library Research	Users mentioned research, conducting research, using databases or other tools.	"I like how they explained that there's a general database and databases that are subject-focused. As someone who loves to do research, I need to know the different databases available to me and the ones that will be helpful for what I want to research."
Library Resources	Users mentioned library resources, including ask-a-librarian chat, and interlibrary loan.	"I felt that the in-text examples and links to the resources made it easy to learn about and navigate the library resources"
Format Features	Users specially mentioned the e-text format, including accessibility, online, asynchronous model, and interactive elements (video tutorials, quizzes, try-its).	"It was fairly concise and easy to follow. I liked the format with videos and text, and I liked how interactive it was."

		1 VirtualPathway...	2 VirtualPathway...	3 VirtualPathway...	Totals
		218	199	164	
Ask A Librarian	2	1		1	2
Bad Data	5	2	2	1	5
Citations & Plagiarism	41	30	7	4	41
Collections	43	16	27		43
databases	38	30	6	2	38
Experience	234	35	53	146	234
Format Features	70	50		20	70
Jobs	11		11		11
Library Research	62	41	14	7	62
Library Resources	170	97	63	10	170
Library Spaces	93	12	75	6	93
Negative	7			7	7
Nothing to Add / NA	49	1	27	21	49
positive	139		21	118	139
Study Rooms	19	2	16	1	19
University Resources...	7	6	1		7
Video Tutorials	12	9		3	12
Totals		332	323	347	1002

Figure 1. Image of coding analysis conducted in Atlas.ti software. The image illustrates the frequency of occurrence for various themes throughout the coding process. The columns represent survey questions 1 through 3.

The mixed methods approach allowed the eLearning librarian to analyze the responses using quantitative methods to find patterns and gather the users’ perceptions about the e-text. This approach facilitated a deeper understanding of the findings and their potential implications for future research and interactions with the e-text.

Findings

The survey results revealed valuable insights about the significance of an asynchronous library-focused e-text. An overwhelming majority of students expressed their appreciation

for the convenience and accessibility of the digital platform, emphasizing its role in facilitating independent learning and enabling them to access library resources at their own pace.

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The feedback further highlighted the effectiveness of the e-text in enhancing students’ understanding of the library. Students reported increased awareness of library services, improved research skills, and a better grasp of information literacy concepts. The asynchronous nature of

the e-text allowed students to engage with the content on their terms, which fostered a deeper level of understanding and retention.

Moreover, the survey identified areas for improvement and potential enhancements. Students suggested incorporating interactive elements like quizzes and simulations to make the learning experience more engaging. They also desired tailored content addressing specific academic disciplines and research needs. It is important to note that the themes were repeated consistently across responses to all three questions with frequent overlap.

Student Appreciation for *Library 101*

Out of the 321 that completed the survey, 221 responded to the first question, "What did you like about *Library 101*?", yielding a 69 percent response rate (see Figure 2). Participants responded that they valued the information provided about the library's resources, particularly the physical and electronic collections. Comments from the respondents indicated that they were unaware of the breadth and variety of materials available at the library. Many were surprised to learn that the library also offered fictional books. One respondent remarked: "I enjoyed learning about all the ways the Library can help, whether it be just for recreational reading or for an important research project."

Participants also appreciated the e-text's format. One stated, "I learned about various resources provided by the libraries at [university], as well as general info regarding said resources. Also, about different topics that I was somewhat familiar with yet not exactly confident with, such as the rules defining plagiarism at the collegiate level." Additionally, the e-text covered some topics that participants were somewhat familiar with but lacked confidence in, such as the rules against plagiarism at the university level.

One respondent who was interested in research commented that they appreciated the distinction between general and subject-focused databases: "I like how they explained that there's a general database and databases that are subject-focused. As someone who loves to do research, I need to know the different databases available to me and the ones that will be helpful for what I want to research. I also liked how they broke down a citation because there are some citations I have to create myself due to the lack of information provided by the article."

Respondents also appreciated the format of the immersive elements in the e-text that allowed them to practice research skills and abilities while completing the course. One noted, "I liked the immersive aspect behind *Library 101*, how users were able to visit databases and other resources affiliated with the [University Library] to explore sources and practice research skills and abilities while completing this course." Overall, the respondents expressed positive feedback about the text, indicating that they found it beneficial and enjoyable to use.

Library Topics of Interest to Students

Out of the 321 that completed the survey, 199 responded to Question 2, "What else would you like to know about the library?", yielding a 62 percent response rate (see Figure 3). The survey received responses from 75 individuals interested in learning more about library spaces. Among the topics mentioned, the most prevalent centered on student

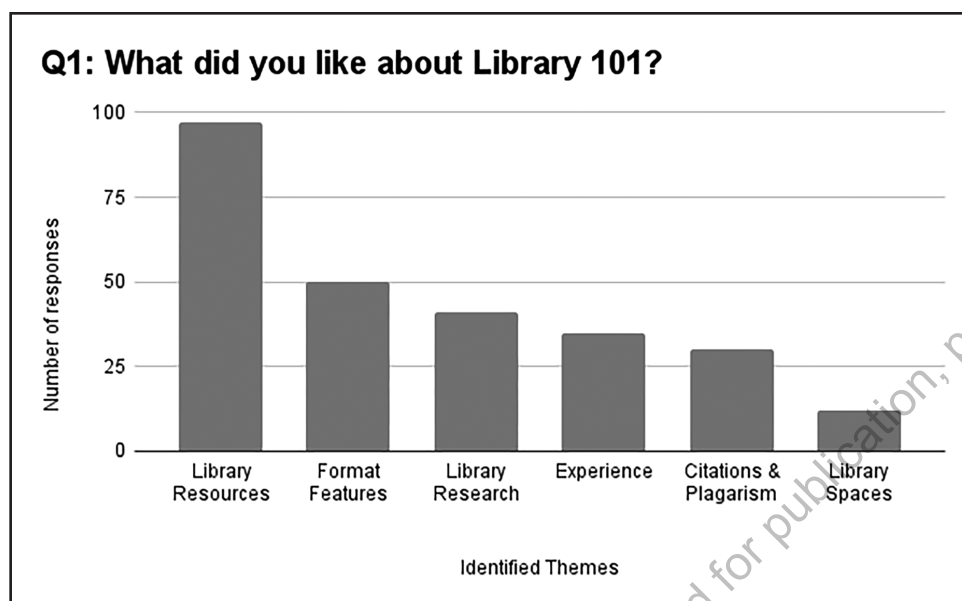


Figure 2. Themes that emerged among student responses to the first survey question: What did you like about *Library 101*?

employment opportunities in the library. One respondent wrote, "I would like to know about potential volunteer or employment opportunities the library provides, especially part-time opportunities for students on campus like myself."

There was also considerable interest in study spaces, with respondents seeking information on their availability, reservation process, and specific locations. One response stated, "I wish I knew more about the study spaces and where they are and how to reserve them etc."

Additionally, 63 respondents wanted to know more about specific library resources, especially the availability of fiction books, the process for requesting addition of books to the collection, and interlibrary loan services. One person commented, "I would like to know if they offer books unrelated to education. For example, just books that are fun to read as a hobby."

Sixty-three respondents indicated that they had nothing else they needed to know and were happy with the e-text. One person wrote, "I don't think I can think of anything else! I feel like this lesson was a good one, and it was the perfect summary." Another commented, "There isn't anything in particular that I want to know about the library, I think this chapter did a really good job of explaining everything." In another comment, one person mentioned a particular librarian, "Not much to be honest, [sic] i go there pretty often, im cool with [name of library employee omitted], one of the librarians there, he's told me a lot about it." Lastly, a few respondents mentioned an interest in learning more about research methodologies, citation practices, and how to avoid plagiarism.

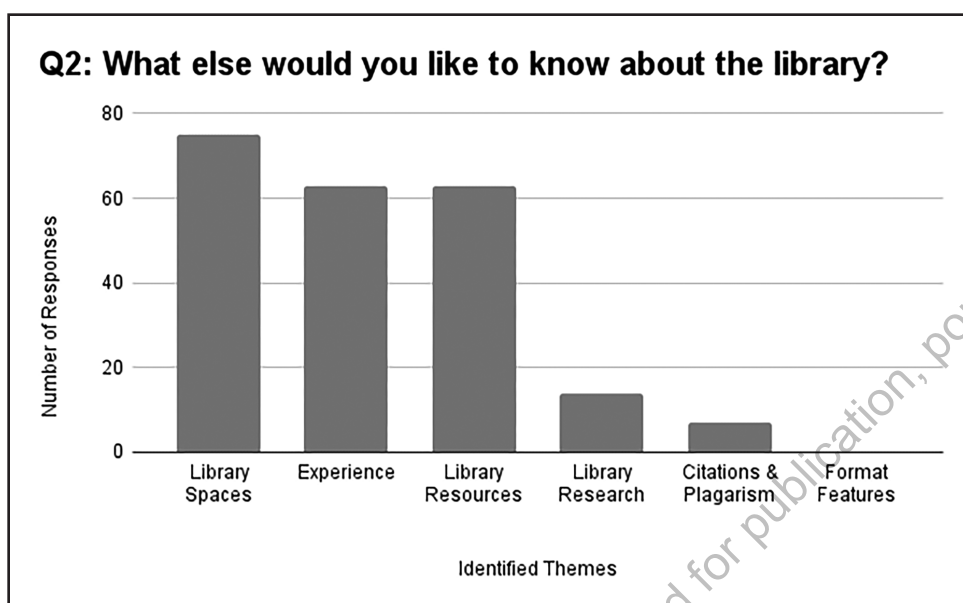


Figure 3. Themes that emerged among student responses to the second survey question: What else would you like to know about the library?

Student Feedback for the *Library 101* Team

Question 3 asked participants if they had any feedback for the *Library 101* team. Out of the 321 who completed the survey, 180 responded, yielding a 56percent response rate (see Figure 4). Of the respondents to this question, approximately 80 percent, provided feedback about their experience with the e-text. Notably, 80 percent of these respondents expressed positive views about using the e-text. One person commented, “[I] don’t have any feedback—the videos were informative but not too long, and the visuals and written parts of the e-text were both engaging.” Another said, “Keep this [sic] a thing, it is very helpful for first-year students.”

A few respondents had suggestions for future interactions with the e-text, making comments such as, “I think it would be fun to have a section that was not focused on library skills but also different libraries on campus and maybe a quote from a student about what they do there/what they like about the location. If students like to go to the library, they will probably start to use library skills or feel less I think that maybe including more interactive videos would always pique the reader’s interest.” One person suggested, “Maybe add more questions! The questions throughout the reading helped keep me engaged and ensure [sic] I was understanding the material.” Although negative comments were relatively few, they primarily centered around the usability of the library website and the e-text format rather than the content itself. One person commented, “I would prefer if the e-text format were more intuitive,” and another said, “Make the library website more user-friendly.”

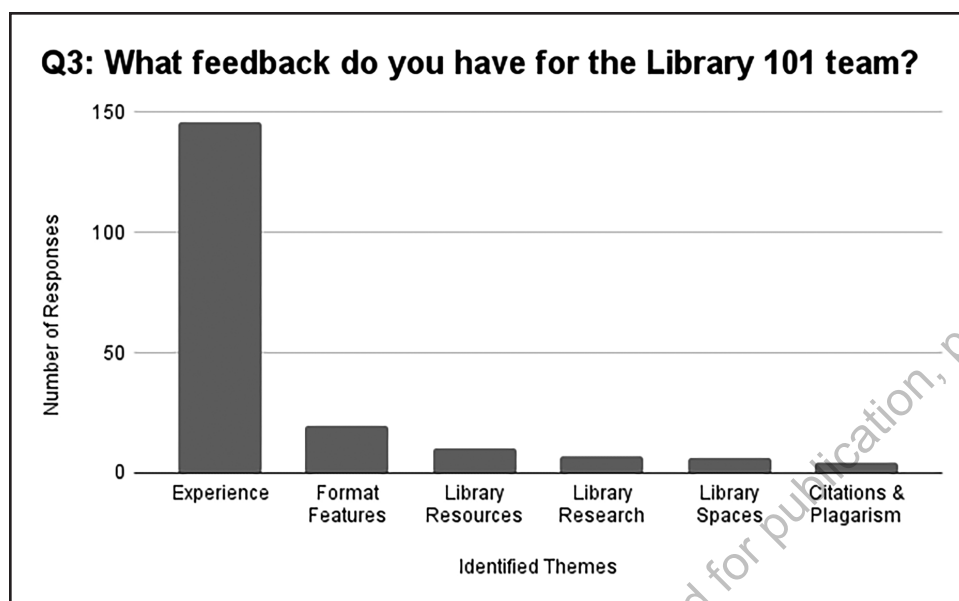


Figure 4. Themes that emerged among student responses to the third survey question: What feedback do you have for the *Library 101* team?

Discussion

The *Library 101* e-text presents a unique and innovative approach to providing library instruction that complements existing resources such as LMS content and LibGuides. Its interactive elements, including video tutorials and Try Its, offer an engaging learning experience. The e-text's flexibility and accessibility allow students to learn at their own pace, making it a valuable resource for both on-campus and remote learners.

The survey results revealed valuable insights into the benefits of creating an asynchronous learning environment for library instruction. An overwhelming majority of respondents expressed their appreciation for the convenience and accessibility of the digital platform, emphasizing its role in facilitating independent learning and enabling them to learn about the library in a setting of their choosing.

The feedback further highlighted the effectiveness of the e-text for enhancing students' understanding of specific skills necessary to engage with the library academically.

The asynchronous nature of the e-text allowed students to engage with the content on their terms, which fostered a deeper level of understanding and retention.

Students reported increased awareness of library services, improved research skills, and a better grasp of information literacy concepts. The asynchronous nature of the e-text allowed students to engage with the content on their terms, which fostered a deeper level of understanding and retention.

The survey also identified areas for improvement. Students suggested incorporating interactive elements like quizzes and simulations to make the learning experience more engaging. They also desired tailored content addressing specific academic disciplines and research needs.

The eLearning librarian has modified the e-text in response to student suggestions from the study. Several respondents mentioned wanting to know more about finding library study spaces and the best study locations. The eLearning librarian updated the language related to library spaces and study rooms to ensure clarity and consistency. She also divided the pages that discuss library spaces into multiple sections to make navigation easier. Furthermore, she added more information about the various types of bookable study spaces and their locations. To address questions about library technology and printing, the eLearning librarian created a separate page that detailed the available technology, including loanable equipment like laptops and chargers. She also provided information about how printing works in the library and where students can print.

In response to feedback received on interactive elements, like the video tutorials and Try Its, the eLearning librarian developed additional video tutorials and Try Its. She developed new video tutorials that center on specific topics identified during the survey to enhance the learning experience. These tutorials complement the existing eLearning suite of research tutorials, providing a cohesive and comprehensive learning resource. The tutorials cover essential topics related to library services. One tutorial explains the interlibrary loan process, facilitating access to resources beyond the library's physical collection. Another tutorial demonstrates how to utilize the Ask-a-Librarian service, offering personalized research assistance. A third tutorial defines the role of a subject librarian, highlighting their expertise in specific disciplines.

In addition to the video tutorials, the eLearning librarian created additional Try Its to foster engagement with the library's website and collections. These Try Its asked students to explore and interact with the library's resources further, fostering a deeper understanding of the library's offerings and services.

A significant addition to the e-text was a section dedicated to Google Scholar. After discussions within TLAS, the eLearning librarian decided that a Google Scholar section was necessary considering students' frequent use of the tool in their research. This section introduces students to the distinctions between Google and Google Scholar and provides guidance on basic searching.

The eLearning librarian mirrored the e-text to the Canvas module to ensure the incorporation of all the new content. Future plans include developing a survey for the Canvas module to compare usage between the e-text and the Canvas module, providing valuable insights into student engagement and preferences.

The *Library 101* e-text has proven to be a valuable tool for students and researchers seeking to enhance their library skills and knowledge. The data gathered from the *Library 101* e-text survey shows how librarians can successfully rethink library instruction, thereby challenging the traditional one-shot model. The e-text's flexible and accessible nature allows learners to take their own pace. It provides learners another avenue to learn about library resources and research outside the traditional classroom setting. The insights gathered from survey participants directly informed the modifications



and additions to the e-text. In this way, students could provide feedback and improve the learning experience.

The *Library 101* e-text provides a comprehensive overview of library resources and services, serving as a foundation for further exploration and engagement with the library. However, it is not a stand-alone resource. It was designed to be integrated with other library resources, such as LibGuides and subject-specific research guides, and to provide a seamless and cohesive learning experience. Additionally, the e-text can be used in conjunction with traditional library instruction sessions, workshops, and one-on-one consultations to reinforce learning and address specific research needs. This layered method reflects a more care-centered approach that aligns with Pagowsky's call to move beyond the traditional one-shot instruction model.¹⁸

Future Research

Future directions for the *Library 101* e-text include partnering with the library's marketing and communication department to develop promotional materials, such as postcards with QR codes that can be taken to library events. The author plans to collaborate with the student success librarian to bring these materials to various events across campus.

The *Library 101* e-text would benefit from library-created promotional materials. There was no marketing of the e-text during the first iteration. The only promotion of the first iteration of the e-text was done through the CITL. Employees of the CITL contacted individual colleges, particularly the introduction to college courses, to see whether they would be interested in using the e-text series in their courses. While this approach was largely successful, creating library-specific promotional materials just for the *Library 101* e-text will significantly enhance the e-text's visibility. This approach will ensure that the e-text reaches a broader range of students, faculty, and staff, fostering greater awareness and utilization of the resource.

Future research will also include conducting an institutional review board (IRB)-approved human subjects research study and providing more information about use and user experience in the e-text and canvas module.

By gaining this information, further research can also focus on how users interact with the Try Its within the e-text. It will also pinpoint specific areas where users struggle, allowing the researcher to make informed decisions about improving the e-text and the canvas module. Furthermore, the data will shed light on what students are interested in learning and the areas where they require additional support, providing valuable insights for librarians and educators.

The library also plans to develop and write a comprehensive *Library 201* e-text. This e-text will serve as an extension of the information provided in *Library 101* and delve deeper into fostering research skills. The eLearning librarian envisions that this expanded e-text will provide a more in-depth exploration of research techniques, methodologies, and resources, catering to the evolving needs of students and researchers. The lessons about research that users gain will allow the eLearning librarian to build a more dynamic and responsive e-text. By addressing these aspects, the author aims to contribute to the enhancement of the learning experience and the provision of high-quality library services.

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