

**Evaluating Unprogrammed Spaces in Public Libraries:
Dayton Metro Library West Branch Opportunity Space**

Liz Grauel

School of Information Studies, Dominican University

LIS-708-01: Evidence Based Planning, Management, and Decision Making

Troy Swanson

October 14, 2022

Evaluating Unprogrammed Spaces in Public Libraries

In an information and civic landscape that is evolving at the speed of our internet connections, public libraries are renegotiating their facilities and services. In navigating the shift from warehouses of books to centers of community life, “the core role of the library as place, the new normal for library buildings, is [to serve as] a place of collaborative learning and community interaction.” (Montgomery & Miller, 2011, p. 229). Matthews (2018) cites a variety of studies that confirm what scholars have been articulating for several decades: users see library buildings as social, civic meeting places for the community, and evaluations of physical space require assessments that provide data both about the use of physical space and how users of the space view it in relation to the social and learning domains of their lives. Drawing from scholarly research about libraries as place, this analysis will propose methods for holistically evaluating unprogrammed physical space in the West Branch of the Dayton Metro Library system.

Identify the Problem

Service & Library Overview

The Dayton Metro Library system (DML) was granted a \$187 million levy following the passing of Montgomery County Issue 70 in 2012 (WYSO, 2012), a budget that was earmarked for rebuilding and renovating the system’s 20 libraries. A chief objective of the project was to build and update the main and branch libraries to meet each community’s needs with adaptable spaces appropriate for each area. DML contracted with Group 4 Architecture in the planning, design, and execution of the project and introduced a novel use of physical space in many buildings called Opportunity Spaces. Initially conceptualized as partner and evolution spaces, Opportunity Spaces were developed as intentionally unprogrammed spaces for community partnerships, traveling exhibits, and weeks-to-months long special programming. Opportunity Spaces have distinct differences from meeting spaces, community rooms, and event spaces. In DML’s own words, “Dayton Metro Library is seeking partners in the areas of arts, business,

culture, education, health, human services, literacy, science, and technology who want to reach new audiences and/or pilot new programs by offering unique activities and services in an Opportunity Space. We believe there are things your organization can imagine that the Library's unique resource can help bring to life." (Dayton Metro Library, n.d.^a)

Though the DML considers each branch part of the same family, its many locations are situated in demographically diverse communities and so each evaluation of programs, services, and space should be branch specific. The newest Opportunity Space opened in early 2022 inside of the newly rebuilt West Branch of the DML, located in the West Dayton community. Since opening it has been occupied by local co-op West Side Makerspace (WMS) under a 1-year termed partnership agreement. In its pilot year, the WMS serves the same community as the West Branch and is utilizing the Opportunity Space as a temporary location where the public can use its equipment and participate in workshops with WMS staff and volunteers. The West Branch Opportunity Space will be the focus of this service evaluation analysis.

Problem Overview

The key objectives for Opportunity Spaces are rooted in the building of social capital and meeting emerging and evolving community needs. Of course, an overarching problem is knowing how to define outcomes and measures of success for such ambitious and highly contextual goals. Opportunity Spaces are a new, unique use of physical space that is not yet directly discussed in literature, and there are no parallel uses of physical space available for benchmarking an evaluation. They do, however, have features like those of more traditional physical spaces like meeting spaces, learning commons, and makerspaces with objectives that are like those of libraries intentionally functioning as place. These concepts will be discussed in the literature review to follow, helping to shape an approach to evaluating the problem at hand: how do we know that the West Branch Opportunity Space is meeting the needs of its community?

Research Questions

To specifically evaluate whether the West Branch is meeting the needs of its community, the following research questions are posed:

1. Is the West Branch Opportunity Space being used by the community?
2. Does the West Branch Opportunity Space create social capital for its users?

The first research question can be assessed with traditional measures of physical place usage. The second, which is tied to the key objectives and desired outcomes of Opportunity Spaces, may be measurable by traditional quantitative methods like surveys to put a check in a box but is improved with the addition of quantitative and critical research methods. Opportunity Spaces are a progressive and non-traditional use of physical space, and the methods of evaluation should match. To support this need, the literature reviewed for this analysis is focused on studies that seek to evaluate the outcomes and success of libraries as third place and platform, common community use of library spaces, the emergence of makerspaces within libraries, and concepts of social capital.

Literature Review

Libraries as Space, Place, and Platform

Fisher et al. (2007) conceptualize the library as place through the frameworks of Oldenberg's third place and Cresswell's definition of space. In this model, libraries are positioned as both a physical venue for congregation and collaboration and as a societal good, functioning in the public and social domains. These themes are echoed in other literature in the field, with Montgomery & Miller (2011) writing "Libraries satisfy an important need for people to be part of the community... the most important task is to focus on the library as a third place and ensure that we remove as many impediments as possible to the users' taking control of the space to meet their own learning and social needs, while still maintaining exceptional information services and resources" (pp. 232-235).

Modern trends in library architecture center users in the design and programming of physical space in public libraries. In their 2019 study, Rodriguez & Barreto write that repurposing physical space with user-centered goals will result in “increased visibility for the library as an important cultural and social center in the community that is responsive to the needs of its users” (p. 746). Library buildings which once prioritized the storage of physical collections are now becoming more functional and impactful to the community the library serves, with research showing that users expect more flexible spaces that can be adapted to serve emerging learning, creation, and meeting uses.

Public libraries are not alone in their transition to place. Academic libraries too are under increasing pressure to redesign and reallocate physical space to meet the changing needs of their users. Andrews et al. (2017) propose a next step in library evolution: “library as platform”. Extending the concept of library as place, the researchers discuss the transition from fully programmed physical space, with library-defined uses, to more open and flexible spaces with use and purpose defined by library users (p. 147). In a case study of Cornell University’s Mann Library, environmental scans, interviews, focus groups, and observations conducted with and by library staff and users were used to plan and configure spaces that were adaptable to user needs and changing programs. New and evolved approaches to assessing library services, including the use of physical space, are demonstrably shifting from library-centered to user and community-centered evaluations.

Community Use of Physical Library Space

Historically, unprogrammed library space has taken the form of meeting rooms, community rooms, and similarly designated physical spaces, typically rented or reserved by users for community and local group meeting space. In these uses, libraries are asked to consider room size and capacity, the availability of equipment, and the prioritization of requests for use (Johnson et al., 2017). The emergence of learning commons and collaborative workspaces (Montgomery & Miller, 2010; Rodriguez & Barreto, 2019), emerging uses of space

that intersperse physical collections with open congregation areas, like Seattle Public Library's book spiral (Fisher et al., 2007), and partnerships with community organizations to provide programming at a regular cadence (Johnson et al., 2017) has expanded the literature on social and civic meeting spaces within libraries (Matthews, 2018).

As libraries adopt user-centered service models, methods from retail research have been adapted for understanding the use of physical space. Observation through the tracking and timing of user movement, including the use of video footage, and questionnaires of patrons exiting the library have been employed to analyze the frequency and length of library visits and the demographics of visitors to different spaces within libraries (Envirosell, 2008). Other studies have used observation methods to understand how the use of community and meeting spaces affect other library users and have employed surveys to evaluate the satisfaction of users who attend meetings and partner programs in meeting spaces (Montgomery & Miller, 2010; Rodriguez & Barreto, 2019; Johnson et al., 2017; Fisher et al., 2007). These methods of evaluation are widely accepted in literature, however their focus on library buildings as a whole and short-term use of meeting and community spaces are not entirely applicable to the longer term, intentionally unprogrammed nature of Opportunity Spaces. This is a research gap that may be bridged by the methods in this paper.

Partnerships and collaborations with non-library community organizations are also relevant to evaluation of flexible physical space. "Collaborative projects, when combined with desires for long-term partnerships among those involved have been shown to lead to long-term benefits & camaraderie that go beyond a particular project," write Yuen & Liew (2022, p. 795). Yuen & Liew find that when library staff are prepared and resources appropriately, partnerships with community organizations can be highly successful. Johnson et al. (2007) report on formal partnerships in which library space is used for cultural enrichment programming, evaluating whether such programs meet the interests of both current library patrons and members of the partners' communities. Survey data indicated that partner programs had lower attendance than

library hosted programs, with most attendees being associated with the partner and not the library. The use of a survey to evaluate the heterogeneity of users is an important part of measuring whether unprogrammed library space, like the West Branch Opportunity Space, is being used by the community.

Makerspaces in Libraries

While the West Branch Opportunity Space is currently occupied by a makerspace co-op, it is not exclusively programmed as a makerspace. Makerspaces in libraries, however, have similarities to Opportunity Spaces in their use of physical space for community engagement. “[T]he provision of space and equipment for participation & learning is the focus” of public library makerspaces (Gahagan & Calvert, 2020, p. 322), and determining the proper methods to evaluate their success is a topic of discussion in the library field. Benjes-Small et al. (2017) approach evaluation using Brinkerhoff’s Success Case Method (SCM), a tool traditionally used to evaluate business goals, to define success for a makerspace and determine how it may be measured. Survey analysis found that libraries most frequently consider usage, user feedback, and the ability to introduce new programs and concepts to the community as criteria for success (p. 429), indicating the need to combine quantitative and qualitative methods for evaluation.

Gahagan & Calvert (2020) note that though makerspaces are being found in a growing number of public and academic libraries, evaluation methods for assessing the success of the communities they serve are not well established. They write, “measures that indicate the quantity of performance tell little of how users have benefited from library services, or the wider effects of library services to the community” (p. 321). This statement illustrates the need to select evaluation instruments that can measure social and community benefits to assess how physical space is contributing to the growth of social capital.

Social Capital

Physical spaces in libraries have traditionally been evaluated by collecting data about user satisfaction and the physical dimensions of libraries on a building-wide scale, frequently

employing surveys and interviews as instruments. The positioning of libraries as place requires a deeper understanding of the context and purpose of library use when evaluating physical spaces. Pairing a critical review of literature with a survey augmented by observation and interviews of library users in 3 branches of Oslo libraries, Aabø & Audunson (2012) examined how libraries function as space for meeting and social activities and its alignment with community goals. They ask, “how do the library visitors take the library and its facilities and services into use, so that these overall societal goals of the library and the local community are obtained?” (p. 138). When the desired outcomes of physical space include place-making goals of community development and social capital growth, these types of questions guide research and evaluation that measures the impacts of space-based services (Montgomery & Miller, 2011; Rodriguez & Barreto, 2019; Bushman et al., 2007; Gahagan & Calvert, 2020).

Recent studies have applied a social constructionist approach to understanding the architecture of libraries and its impact on cultural and social infrastructure, primarily seeking the ideal qualities of modern library spaces (Fisher et al., 2007). Fisher et al. posed the research question “What does the SPL Central Library mean as ‘place’ - socially, politically, and economically - to library users and passers-by?” (p. 140). This question and the work towards operationalizing libraries as place begin to unveil a methodology for understanding how a library’s community values physical space as a mechanism for building social capital. Methods for measuring the social value of makerspaces emerged from Gahagan & Calvert’s (2020) paper, noting that data gleaned from surveys and focus groups as well as observational evidence provide the most robust insights into social outcomes from this use of space. What emerged in their research is the value of narrative analysis for sense-making.

Evaluation of Physical Space

In a critical review of space assessment methods, Badia (2020) describes available techniques for evaluating physical space in academic libraries, along with best practices for data collection. Though this analysis is not focused on public libraries, Badia’s findings have general

relevance to evaluating physical library spaces in multiple settings. Physical space evaluation methods most frequently include data collection through surveys, focus groups, interviews, usage measures, and observation, frequently in tandem. “Studies that incorporated two or more space assessment methods have reported that each one brought relevant and unique information for making improvements that would have otherwise been missed” (p. 215). Gahagan and Calvert (2020) corroborate this finding and its applicability to evaluating physical space in public libraries, noting that quantitative measures on their own are insufficient proof of user benefits, particularly when measures of social outcomes are needed. Outcome-focused evaluation and assessment methods can help with determining social outcomes, which include social inclusion and community development, and emerging uses of library space are best measured by combined quantitative and qualitative methods, improving confidence in findings (p. 325). Visitor statistics are often the most accessible quantitative data in physical spaces, and they become more meaningful to the evaluation of social capital and community-impact objectives when combined with qualitative data.

Granais’s 2021 report for Wilder Research further emphasizes the benefits of combining evaluation methods. The paper states that telling the story of social impact requires “an outcome-based approach involving multiple methods” (p. 2) and details a number of existing frameworks in use by public libraries today that are focused on this type of analysis. Notably, Scotland’s Public Library Quality Improvement Matrix (PLQIM) includes the creation of social capital as an outcome, and the American Library Association’s Project Outcome survey’s community engagement section includes quantitative measures that can be useful in this analysis.

Scope of Process & Key Stakeholders

DML-West Branch is a public library located in Dayton, Ohio. Dayton has a population of 137,644. The city has a poverty rate of 30.6%, with a median household income of \$32,540. Of

the population, 55.7% are white and 37.9% are Black (United States Census Bureau). The West Dayton community served by West Branch is the poorest area of the city with many residents relying on public internet access. The West Branch was rebuilt and relocated to be accessible by bus in 2022 and operates Monday-Saturday, and the Opportunity Space is open during library hours.

DML's mission is to inform, inspire, and empower its community. Its vision statement says "The Dayton Metro Library brings people of all ages and backgrounds together to discover new things about the world, themselves, and each other. Within our Branches and beyond our walls, we are advocates for exploration, champions of literacy, and active facilitators of empowerment, inclusion, and positive change" (DML, n.d.^b). It is currently operating on a five-year strategic plan through which its facilities continue to be renovated and rebuilt with funds from its 2012 tax levy (DML, n.d.^c).

This evaluation will impact the Community Engagement Manager, who is responsible for the management of Opportunity Spaces across DML and will be seen as the owner of results when delivering its evaluation. The West Branch Manager and Assistant Branch Manager will be responsible for implementing data collection, and Patron Service Assistants will participate in it as well. Of these key stakeholders, the managers will be tasked with responding to the findings of the evaluation and responsible for implementing improvements to service in their branch. This service impacts residents of the West Dayton community, particularly those who patronize the library, as well as the operators and patrons of the Westside Maker Space that currently occupies the West Branch Opportunity Space. These immediate key stakeholders are also joined by West Dayton community organizations that seek library partnerships and their patrons.

Summative Evaluation Analysis

Summative evaluations measure the outcomes of library services (Matthews, 2018, p. 3). This section considers four types of summative evaluation used in the LIS field and how they may apply to this analysis.

Library-Centric

Library-centric evaluations are internally focused, and in this case would ask how the West Branch Opportunity Space helps the library meet its goals while considering how unprogrammed space as a service contributes to overall library efficiency. Goals specific to the operations of DML West Branch would be considered, including staffing and staff time allocation, equipment and other resources, and costs of operating and facilitating the use of the Opportunity Space. Because the DML system has Opportunity Spaces in several branches, the West Branch can benchmark their evaluations against them, but it is important to remember that benchmarking of Opportunity Spaces in general is difficult due to their unique existence in DML.

Customer-Centric

Customer-centric evaluations are externally focused, concerned with how a service impacts and is perceived by the people it serves. This kind of evaluation is highly applicable to understanding the community's expectations, use, and experiences with Opportunity Space as a library service. We would like to know if the library's goals in the provision of this unprogrammed space match the goals of the community, both as patrons of the library and its services and as occupants of library space. User-centered questions that seek to gauge what a physical place means to its users and communities such as those posed by Fisher et al. (2007) are excellent examples of one type of information this analysis seeks for both of its research questions.

Outcomes-Based

The outcomes-based evaluation seeks to assess how well a service is achieving its intended results and objectives (Matthews, 2018, p. 6). The intended outcomes of Opportunity

Spaces are to build social capital through physical space that can be repurposed to meet changing needs of the community. Research question 2 asks “Does the West Branch Opportunity Space create social capital for its users?” and is suited best by an outcomes-based approach to evaluation that asks questions about the impacts of the usage of physical space and employs a mixture of quantitative and qualitative measures in data collection.

Manager Determined

The implementation of Opportunity Spaces is part of a larger organizational change across the library system, so there is likely a great deal of administrative interest in their use embedded in a larger overall evaluation of physical space. This service evaluation will provide an understanding of the actual use and outcomes of unprogrammed space and will tell administrators about its use and impact, but it is better suited to be part of a more holistic analysis to meet their needs and interests.

Considering Outcomes: Applying Orr’s Model

Richard Orr’s *Input – Process – Output – Outcomes* model examines how library resources are transformed into a set of services that are used and then have some kind of effect on both users, the library, and its community (Matthews, 2018, p.19). The following illustrates an application of this model in evaluation of the West Branch Opportunity Space.

Resources

Input measures focus on the resources of the library as the starting point of a service. In this study, resources include the physical room that houses the West Branch Opportunity Space, the library-owned equipment used by its occupants, and the library staff who are responsible for the building’s operations.

Capability

Process measures analyze the activities and actions that enable the delivery of a service. In this case, library staff members are central to organizing library resources so that

Opportunity Spaces are available for access and use. Relevant data includes the amount of time required by West Branch library staff and the system's Community Engagement Manager to support occupants and their visitors. Seeing that staff resources are well balanced between the support of Opportunity Space activities and other use of physical space is a positive indicator. If there is a lack of available staff or a strain on other services, this would indicate a problem in capability.

Utilization

Output measures are part of evaluating the utilization of a service. Research question 1, "Is the West Branch Opportunity Space being used by the community?", is positioned in this part of Orr's model. If the Opportunity Space is being used, we should see quantifiable evidence about occupancy, including inquiries and applications from community organizations to use the space, as well as counts such as visitors to the Opportunity Space and attendance at programs hosted by Opportunity Space occupants.

Impact/Effect

The value to stakeholders is measured through outcomes. Evaluations focused on assessing social capital in response to research question 2 are outcome-based and seek to determine the larger impact of the West Branch Opportunity Space on the community it serves. Indicators of success include positive feedback from users and occupants, growth of participation in the occupying group's activities and offerings, and evidence of new or strengthened relationships among community members after using the service.

Defining Methods & Data

A combination of quantitative and qualitative data will be used in this service evaluation analysis. The methods of data capture are described below.

Existing Data

During normal operations, DML-West Dayton captures several types of data. Gate counts are available from visitor traffic at the library's main door. Staff time is captured on the library's timesheet system, which uses categories to track time spent on various activities, including services to support the Opportunity Space. Applications for Opportunity Space occupancy are also tracked. These data can support the basic evaluation of space use and are useful for benchmarking facility use altogether, but they don't provide enough information to assess the community usage of the Opportunity Space or their impact on social capital.

Qualitative Methods

Qualitative methods are critical for creating data that can be analyzed to understand the social impact of Opportunity Spaces. Researchers in similar projects implemented interviews to determine users' needs and expectations of physical space, their social and political experiences and perceptions of the space, and to better understand quantitative results from surveys (Benjes-Small et al., 2017; Fisher et al., 2007; Gahagan and Calvert, 2020; Badia, 2020; Aabø & Audunson, 2012). Focus groups have been demonstrated as a qualitative method for understanding community and partnership outcomes from public library spaces (Gahagan & Calvert, 2020; Andrews et al., 2016; Montgomery & Miller, 2001; Badia, 2020; Rodríguez & Barreto, 2019). These same methods are applicable here and will help to understand the outcomes and impact of Opportunity Spaces on users, partners, and the community at large.

Quantitative Methods

Quantitative data is important to understanding if Opportunity Spaces are being used by the community. Implementing gate counts at the door of the West Branch Opportunity space can help with this, as well as attendance counts for activities hosted by the Opportunity Space occupants. Surveys are another method of generating quantitative data to evaluate both the use and social impact of the Opportunity Space. Surveys gauging sentiment and experiences distributed to users and the community can provide numeric and statistical data for analyzing

levels of social value, interest, and external benefits of physical space (Benjes-Small et al., 2017; Aabø & Audunson, 2012; Gahagan and Calvert, 2020). These same types of surveys can provide valuable demographic information and data that shows which users of the space are new and returning guests of the library (Johnson, et al., 2017) and can provide data that guides questions and topics used in interviews and focus groups (Badia, 2020). Gate counts and surveys provide useful data for understanding if Opportunity Spaces are being used, and surveys can support an understanding of the social capital they provide.

How Do We Know?

Users and the library community should be centered in a service evaluation analysis that seeks to understand the use and impact of the West Branch Opportunity Space. A summative evaluation pairing outcomes-based and customer-centric approaches will best serve this analysis and help us to know when and how the service is used and how it impacts the community, demonstrating the value of the Opportunity Space with respect to the DML's objectives and community needs.

Is the West Branch Opportunity Space being used by the community?

The best method to evaluate this research question is survey analysis. Providing an exit survey to visitors of the Opportunity Space will enable us to collect data about users with greater detail and richness than gate counts provide. With the proper questions we will know whether visitors are more likely to be current library users or new, if they came to the library expressly to visit the Opportunity Space, and we can gain valuable perspective through demographics to make inferences about the reach of the service within the community. Response rates are the major limitation to this method, and gate counts may also support this evaluation.

Does the West Branch Opportunity Space create social capital for its users?

Evaluating this research question requires a combination of survey and semi-structured interviews. Social capital is created through interpersonal connection and sense of belonging,

and has nuances based on community and individual identities. A mailed or emailed survey can provide important statistical data about the community's knowledge of and interactions with the Opportunity Space, and interviews with users and partners who occupy the Opportunity Space will provide deeper context and richer information that can be examined through narrative analysis. Combining these methods enables a more comprehensive evaluation of social impact and centers the users and community in their use.

Conclusion

The ever-evolving public library has changed the ways we use and evaluate physical space. Emerging trends in place and platform require us to approach service evaluations with greater attention to social capital and community outcomes, shifting the focus from library-centric to customer- and- outcome oriented methods of evaluation. The West Dayton Opportunity Space is a novel use of physical space, and no analyses yet exist as a model for evaluating unprogrammed spaces like this, however, similar features of community, meeting, and makerspaces give us frameworks to build upon. Combining qualitative and quantitative methods of analysis enable us to create a robust and measurable understanding of the use and utility of Opportunity Spaces to the communities they serve.

REFERENCES

- Aabø, S., & Audunson, R. (2012). Use of library space and the library as place. *Library & Information Science Research*, 34(2), 138–149. <https://doi.org/10.1016/j.lisr.2011.06.002>
- Andrews, C., Downs, A., Morris-Knowler, J., Pacion, K., & Wright, S. E. (2016). From “Library as Place” to “Library as Platform”: Redesigning the 21st Century Academic Library. *Advances in Library Administration and Organization*, 145–167. <https://doi.org/10.1108/s0732-067120160000036006>
- Badia, G. (2020). More Data Collection ≠ More Valid Results: A Critical Review of Space Assessment Methods in Academic Libraries. *New Review of Academic Librarianship*, 26(2-4), 214–230. <https://doi.org/10.1080/13614533.2020.1777575>
- Benjes-Small, C., Bellamy, L. M. G., Resor-Whicker, J., & Vassady, L. (2017). Makerspace or Waste of Space: Charting a Course for Successful Academic Library Makerspaces. In *ACRL 2017 At The Helm: Leading Transformation* (pp. 428–436). American Library Association.
- Dayton Metro Library. (n.d.^a). Call for Partners – Dayton Metro Library Opportunity Space. <https://www.daytonmetrolibrary.org/docs/OpportunitySpaceRFP.pdf>
- Dayton Metro Library. (n.d.^b). *About Us*. About Us - Dayton Metro Library. <https://www.daytonmetrolibrary.org/about-us>
- Dayton Metro Library. (n.d.^c). *Dayton Metro Library Strategic Plan*. Dayton Metro Library. <https://www.daytonmetrolibrary.org/about-us/strategic-plan>
- Envirosell. (2008). *Best Practices for the Customer-Focused Library: A Report Prepared for the Metropolitan Library System*.

- Fisher, K. E., Saxton, M. L., Edwards, P. M., & Mai, J.-E. (2007). Seattle Public Library as Place: Reconceptualizing Space, Community, and Information at the Central Library. In *The Library as Place: History, Community, and Culture* (pp. 135–160). Libraries Unlimited.
- Gahagan, P. M., & Calvert, P. J. (2020). Evaluating a Public Library Makerspace. *Public Library Quarterly*, 39(4), 320–345. <https://doi.org/10.1080/01616846.2019.1662756>
- Gracias, Anna. (2021). Defining Quality Library Services and Evaluation Resources for Public Libraries: A Literature Review for State Library Services. https://www.wilder.org/sites/default/files/imports/StateLibraryServices_LiteratureReview_9-21.pdf
- Johnson, T., Van Haren, C., & Hjorting, M. (2017). Sharing Our Library Facility: Prescott Valley Arizona Public Library. *Public Library Quarterly*, 36(2), 154–166. <https://doi.org/10.1080/01616846.2017.1312198>
- Matthews, J. R. (2018). *The Evaluation and Measurement of Library Services*. Libraries Unlimited.
- Montgomery, S. E., & Miller, J. (2011). The Third Place: The Library as Collaborative and Community Space in a Time of Fiscal Restraint. *College & Undergraduate Libraries*, 18(2-3), 228–238. <https://doi.org/10.1080/10691316.2011.577683>
- Rodríguez, R. A. M., & Barreto, A. C. (2019). The Library Park Project: Proposal for Redesigning the Spaces in the Martí Provincial Library to Facilitate the Implementation of Services Impacting Community Development. *Library Trends*, 67(4), 745–758.

United States Census Bureau. (n.d.). Census Table Results. Retrieved October 10, 2022, from <https://data.census.gov/cedsci/table?q=Dayton+city%2C+Ohio&d=ACS+5-Year+Estimates+Subject+Tables&tid=ACSST5Y2019.S2801>

Yuen, K., & Liew, C. L. (2022). Examining Public Library Collaborative Partnerships with School Makerspaces and “Making Programmes.” *Journal of Library Administration*, 62(6), 793–809. <https://doi.org/10.1080/01930826.2022.2102381>

WYSO. (2012, November 7). *Dayton Metro Library Bond Issue Passes*. WYSO. Retrieved October 11, 2022, from <https://www.wyso.org/news/2012-11-07/dayton-metro-library-bond-issue-passes>