Wilder Research

Defining Quality Library Services and Evaluation Resources for Public Libraries
A Literature Review for State Library Services

In summer 2021, State Library Services (SLS), a division of the Minnesota Department of Education, contracted with Wilder Research to help build the evaluation capacity of public libraries across the state. As part of this work, Wilder Research reviewed academic and grey literature for evidence- or research-based frameworks to help define key components of quality library services or programming. We also identified existing evaluation resources (e.g., tools) that may be useful to public libraries.

The following research questions guided our search:

1. What evidence- or research-based frameworks exist that define key components of quality library services and programming (similar to the [Believe It, Build It framework](#) from Ignite Afterschool)?

2. What evaluation tools and resources exist that are specific to libraries or can be adapted to meet the evaluation needs of libraries?

Wilder Research librarians identified 83 publications based on initial search criteria. Databases searched include Academic Search Premier, LISTA, Ebsco MegaFILE, ERIC, and Google Scholar. From the list of publications identified, Wilder and SLS determined the articles that were most promising based on their abstract or available description. Wilder staff reviewed each promising publication in depth and included relevant information in the following summary. In total, Wilder Research reviewed 34 publications; however, this review references a selection of the most relevant publications.

In addition to answering our key research questions, findings from this review will inform the development of an evaluation toolkit for libraries. We will also incorporate identified tools and activities into an evaluation training series that Wilder Research will be providing on contract with State Library Services for Minnesota-based public libraries.

Brief overview of evaluation and assessment in public libraries

Public libraries are increasingly recognizing the significance of evaluating library services to improve user experience and demonstrate their community-level impact. "Evaluation is the process of understanding the extent to which specific goals are reached and provides information that is useful in demonstrating the library's worth" (Gross et al., 2016, p. ix). Libraries operate within a changing societal context and often feel threatened and unsure about their sustainability. Irwin and St-Pierre (2014) comment on the daily challenges and opportunities libraries experience, including responding to the developing field of digitization, changing usage patterns, and evolving expectations and needs of patrons. In addition to community changes, funders' requirements for measuring and reporting libraries' impact have become more comprehensive and, therefore, more demanding.

Evaluation of library services, in both public and academic libraries, began with the collection of statistics (e.g., circulation data). As described by Shi and Levy (2017), typical data largely captured the perception of the service provider (e.g., the librarians or library staff), described the phenomena (e.g., how many books

were checked out), and took the form of a one-way application that ended in statistics collection. As library services have evolved, it is now widely recognized that user perceptions of service quality, user expectations, and user satisfaction are essential elements of any assessment activity. To this end, libraries have more recently started creating surveys or questionnaires, conducting focus groups, and analyzing complaints more frequently to incorporate user voice in evaluation activities (Shi & Levy, 2017).

In addition to an emphasis on the user perspective, libraries are slowly transitioning from simple output measures to examining outcomes as well. Libraries are looking to understand and describe if and how their programs and services are having an impact on people's lives. For example, it may be good to know that 1,000 people across Minnesota participated in a virtual book club event, but how did participating in the book club affect them? Do they feel more connected to other readers? Did they learn something new? Library funders are increasingly looking for libraries to demonstrate their social value (Hallam, 2018). Several important studies have begun to look at qualitative data that investigates notions of benefit, impact, community enrichment, and societal gain, therefore moving away from using quantitative tools alone (Reid, 2020).

Furthermore, community members and partners see libraries operating as community hubs that, as "third place" institutions, play a key role in building healthy communities. "Third places" is a term coined by sociologist Ray Oldenburg that refers to places where people spend time between home (first place) and work (second place). Many describe these locations as community builders (Butler & Diaz, 2016; Klinenberg, 2018a). Oftentimes, public libraries play the role of ad hoc social service resource hub and navigator, which requires that they have strong community partnerships. This evolution has influenced the types of programs and services offered by libraries (Cabello & Butler, 2017). American Sociologist Erik Klinenberg (2018a) describes libraries as a vital part of our social infrastructure in his book, Palaces for the People. In an opinion piece, he notes that "libraries stand for and exemplify something that needs defending: the public institutions that – even in an age of atomization and inequality – serve as bedrocks of civil society" (Klinenberg, 2018b, para. 16). In order to tell the story of the library's impact from this perspective, a broader set of data than what has been traditionally collected is required. Recent trends in library evaluation (often referred to as assessment) include: 1) greater reliance on external measures and user impacts, and greater alignment with strategic planning; 2) an outcomes-based approach involving multiple methods; 3) collaboration with partners; and 4) demonstrating impact and value (Guildford College, n.d.).

Unfortunately, it is common for library staff to lack the evaluation skills, capacity, and experience necessary to assess library services. Moreover, outcomes-based planning models and other evaluation frameworks that are often used by academic libraries have been deemed too complicated to use or a poor fit for public library services (Gross et al., 2016). The following two sections of this literature review summarize several frameworks that libraries can use to help define quality library services and for evaluation planning and implementation.

Relevant frameworks for defining quality library services

Defining what makes a library service "high quality" is challenging. However, having evidence-based standards for quality library programming would provide libraries with guidance for program development and increase confidence in their ability to achieve desired impacts. A set of standards would allow libraries to identify clear measures to assess their impact and readily benchmark their service quality and impact against other libraries. Additionally, it would relieve public libraries from a trial and error approach to program development and the daunting task of looking at standards specific to the wide variety of programs provided (e.g., workforce development, early childhood education, afterschool programs, civic engagement).

Research addressing the question of library service quality is abundant for academic libraries, but lacking for public libraries (Hallam, 2018; Reid, 2020). Additionally, little comprehensive analysis or validation of current library assessment tools has been performed (Shi & Levy, 2017). Resources that provide guidance for developing quality library programming and services are largely based on experience or anecdotal evidence. This disparity between public and academic libraries may be due to a number of factors, including fewer resources; an absence of connection to a larger institution that actively promotes the use of outcome measures; a perception of evaluation as difficult or requiring scientific and statistical expertise; a lack of requirements to prove their accountability; and the large variation in size, types of programs, and service population among public libraries. Academic libraries have also been encouraged by academic groups, such as the Association of Research Libraries, to pursue assessment and are often allowed the time to do so. Promotion and tenure structures further motivate academic librarians to publish research (Irwin & St-Pierre, 2014). Among academic libraries, a set of Standards for Libraries in Higher Education published by The Association of College and Research Libraries are commonly used. These standards, developed through an examination of research and best practices, guide academic libraries in advancing and sustaining their role as partners in educating students, achieving their institutions' missions, and positioning libraries as leaders in assessment and continuous improvement on their campuses (Association of College and Research Libraries, 2018). Unfortunately, the aims and orientation of academic and public libraries are disparate.

Public library service standards exist in several European countries where the government plays a larger role in library services. For example, the governments of Scotland and Wales developed frameworks that provide a set of standards used for library assessment. Two frameworks, developed by the governments of Scotland and Wales, provide a set of standards used for library assessment. However, it is unclear to what extent these standards are based in research evidence versus a compilation of desires formulated by the governing bodies. Scotland developed a set of quality standards for its public libraries named the Public Library Quality Improvement Matrix (PLQIM). Originally developed in 2004, this tool was implemented in libraries across Scotland for quality improvement audits and was adapted for use by public libraries in the Australian State of Victoria. From 2014-2017, the Scottish Library and Information Council reviewed and made updates to the matrix based on expert review. An article by Reid (2020) outlines the review process and adjustments made to the framework. The core functions of adequate service as identified in the updated PLQIM include:

- Providing universal access to hardcopy and electronic resources which are free, consistent, and customer focused

- Enabling access to resources for reading, information, and learning

- Creating social capital by encouraging community involvement and community-based activity

- Helping to minimize social and digital exclusion

- Supporting learning and information needs in the information society and knowledge economy[1]

- Promoting access to Scotland's cultural heritage and promoting cultural and creative activities

- Encouraging the public to pursue individual interests

- Promoting social justice, civic engagement, and democracy

- Working in partnership with other agencies and organizations to offer value added services

- Strategic network provision

---

[1] Information society and knowledge economy describe a social system greatly dependent on information technologies to produce and distribute all manner of goods and services (Encyclopedia.com, 2019).

Each of these areas are rated as unsatisfactory, weak, satisfactory, good, very good, or excellent and libraries are given an overall score based on these ratings (Reid, 2020).

Similarly, the government of Wales developed a framework of public library standards for 2017-2020. The Welsh Public Library Standards framework provides a mechanism to enable service providers to plan their service provision and for the public to know what they can expect from their library service. The framework includes 12 entitlements. Examples of "entitlements" include: 1) libraries in Wales will be free to join and open to all; 2) libraries in Wales will ensure friendly, knowledgeable, and qualified staff are on hand to help; and 3) libraries in Wales will provide appropriate safe, attractive, and accessible physical spaces with suitable staffed opening hours. It also provides 16 quality indicators that fall into the categories of inputs, outputs, and outcomes (Llywodraeth Cymru Welsh Government, 2017). These frameworks are not as specific and, therefore, may not be as useful as the effective practices listed in the Believe It, Build It framework for afterschool programming.

The Reference and User Services Association (RUSA), a division of the American Library Association, developed fairly specific standards, guidelines, and recommendations for reference services. RUSA refers to these as best practices or guidelines identified in the literature. While largely specific to reference services, some of them may be applicable to a broader range of programs and services (e.g., guidelines of financial literacy education, guidelines for library services to older adults, guidelines for library services to Spanish-speaking library users) (Reference and User Services Association, 2021). Further research is needed to develop evidence-based quality library service and programming standards that are widely applicable to public libraries. In lieu of these service standards, libraries may consider referring to quality program standards, as available, for relevant social service fields of interest, such as workforce development, civic engagement, and early literacy.

Relevant frameworks for evaluation of public library programming and services

We identified several conceptual models or frameworks used by libraries to guide evaluation. Matthews (2018) lists several conceptual models or frameworks appropriate for library settings. While these models may help to assist in our understanding of the functions and services provided by libraries, they do not describe what makes a library service "high quality."

Some models have a matrix structure. Cronin's Evaluation Matrix, for example, proposes evaluation from three different stakeholder perspectives and from the angle of cost, effectiveness, and benefits. Griffiths's and King's Evaluation Matrix suggests five perspectives to consider (library, user, organization, industry, and society) and five different library components (entire library, functions, services/products, activities, and resources) for assessment (Matthews, 2018).

An article by Hallam (2018) describes the Evidence Based Library and Information Practice model (EBLIP), a model used "to improve the quality of decisions made, to demonstrate the value of the services and programs provided, and to secure long-term support from funders." Effective evidence-based practice, according to the EBLIP model, requires drawing on three kinds of evidence: research evidence, local evidence, and professional knowledge. Elements of the EBLIP are similar to that of a standard evaluation cycle. Process elements include articulate, assemble, assess, agree, and adapt (Hallam, 2018). The author describes what libraries need to do related to each process element, what types of questions they need to ask, and what subsequent action they need to take. However, it does not specify how libraries might do some of these things (e.g., assemble the evidence).

A simpler model, Nicholson's Evaluation Matrix, considers evaluation from the internal (library) and external (customer) perspective to determine cost-benefit and relevance of the library. This model is intended to aid library evaluators in choosing targets for measurement that will help in the understanding of the library system from

a holistic view. Overall, the use of this matrix encourages the use of a variety of measurements and emphasizes the importance of including differing viewpoints in library evaluation. The four parts of the matrix include:

- the internal view of the library system (what does the library system consist of?), which compares components of the library system to some type of standard and does not involve library users

- the external view of the library system (how effective is the library system?), where the user presents a query to the library and examines the usability of the system and the aboutness[2] of the results presented by the library

- the external view of use (how useful is the library system?), where the user presents the overall usefulness of information gained through the library, either through elicitation by an evaluator or by citing/linking to library works

- the internal view of use (how is the library system manipulated?), where the data-based behavioral artifacts of interactions between users and a system are analyzed to understand how a system is manipulated

Regardless of the framework used, it is always helpful for libraries to consider the evaluation cycle, which illustrates that evaluation should be cyclical, iterative, and ongoing.

Other useful library evaluation models include a logic model, which links outcomes or impacts with program or service activities and processes and the underlying assumptions/principles of the program. Additional models to consider, according to Matthews (2018), include Suchman's Evaluative Model, Orr's Evaluation Model, The Performance Spectrum, Conceptual Framework for Library Metrics, Portuguese Performance Evaluation Models and Practice Types, Level of Impact Model, and Irwin's and St-Pierre's Framework for Cultural Change and Evaluation (Matthews, 2018).

A couple of self-evaluation frameworks specific to public libraries may be of most use to public libraries new to evaluation, as these are resources that assist libraries to conduct evaluation internally. Libraries are increasingly seeking staff with skills and expertise in evaluation and assessment in order to conduct evaluation without needing to hire an external consultant. As mentioned previously, the Public Library Quality Improvement Matrix (PLQIM), developed in Scotland, includes seven quality indicators associated with quality library services: access to information, personal and community participation, meeting readers' needs, learners' experiences, ethos and values, organization and use of resources and space, and leaders (Reid, 2020). Additionally, a framework based on the PLQIM, developed by the State Library of Victoria, identified five key areas: offering access to information, learning, and leisure; developing individual skills, competence, and well-being; expanding social capital; showing leadership; and creating, managing, and enhancing systems and processes (State Library of Victoria, 2011). A limitation of all of these evaluation models is that the field has not developed a predictive model of service as libraries' resources, services, and population served vary greatly (Matthews, 2018).

While both frameworks (PLQIM and State of Victoria) may be helpful for the identification of important metrics, examining desired public library outcomes may be another approach to help guide libraries to develop quality programming and conduct meaningful evaluation. A study by Barchas-Lichenstein et al. (2020), aiming to categorize library programs, identified a set of intended outcomes for quality library services. The three types of outcomes identified are not necessarily mutually exclusive. Educational outcomes include learning new skills or information or changing behavior in some way, recreational outcomes include exposure to something new, and dialogic outcomes include interacting with others who are not like them or hearing a new perspective.

---

2   A term used in library and information sciences often synonymous with subject (documents) (Wikipedia, n.d.).

In addition to identifying relevant outcomes, it is equally important to understand the key audience for a library program or service because it can help explain the relationship of library services to population data, and support monitoring of inclusion strategies. Experts agreed that the following seven intended outcomes were collectively exhaustive, although any given program might combine multiple outcomes:

(i) participants learn new knowledge; (ii) participants learn new skills; (iii) participants change their attitudes; (iv) participants change their behaviors; (v) participants gain awareness of library resources, services, or programs; (vi) participants have fun or are inspired, or participants are exposed to something new (e.g., art, food); and (vii) together, libraries and participants build stronger and healthier communities (Barchas-Lichenstein et al., 2020, p. 572).

The article describes four dimensions of libraries that can contribute to the eventual goal of measuring the library's impact: 1) library profile, with a focus on type of library; 2) program characteristics, with a focus on primary intended outcomes; 3) program audience, with a focus on audience scope (whether the program is tailored to a wide or narrow audience); and 4) program administration variables, particularly the program development model used (e.g., developed by a library itself; by/with a community partner; or by a national supporting entity, with the library managing implementation) (Barchas-Lichenstein et al., 2020).

In Denmark, the Impact Compass, described as a methodological approach or tool, was designed to show the impact a library has on users. The emphasis of this approach puts library users at the center of the conversation about the value and impact of the public library. The approach focuses on four impacts for users: emotional, intellectual, creative, and social. These four dimensions are rooted in research conducted around the impacts of various British cultural activities (Seismonaut and Roskilde Central Library, 2021).

Furthermore, Rooney-Browne (2011) shares a figure that illustrates potential social value outcomes and impacts for public libraries that can be measured using qualitative methods. "Many of these outcomes are intangible which makes identifying and measuring them a challenge because their value is often intrinsic" (p. 16). Potential outcomes listed include: community engagement; social cohesion; social, human, and intellectual capital; improved self-esteem; empowerment; improved life chances; employability; social networks; civic values; sense of place; and informed community members.

Lastly, and probably easiest to implement, is Project Outcome, an initiative launched by the Public Library Association to support assessment and evaluation work in public libraries. Project Outcome provides resources and tools to create surveys and analyze outcomes data and to help libraries set goals for outcome measurement (Public Library Association, n.d.). The downside of this resource is that it does not allow for a lot of customization and is limited to survey data collection.

A study by Hurst et al. (2016) found that the majority of library managers conduct evaluation in an ad hoc and reactive manner and identified the need and desire for a toolkit and dashboard that would standardize data collected and promote the ability to compare across institutions. Of note, the majority of participating libraries for this study were academic libraries and many of these desires may be more applicable for large library systems. Their research identified the following desires for a toolkit:

- Key library performance indicators and supporting data formulas

- Library data inventory

- Library data dictionary

- Data normalization script library (i.e., a set of rules that are applied to a database, such that the schema of the database ensures all the rules are followed)

- Customizable web browser-based dashboard with data visualization modules of key library performance indicators
- Recommendations and case studies for open data warehousing (i.e., data management system) solutions
- Establishment of a membership consortium and online community to enable the adoption and support long-term sustainability of the toolkit and dashboard

Some of these desires may be shared by public libraries and should be considered in future toolkit development.

Before adopting an evaluation framework, libraries may need to assess their readiness. It is important for libraries that are new to evaluation to take manageable steps toward incorporating evaluation into their organizational structure (Gross et al., 2016). The article by Irwin and St-Pierre (2014) provides a continuum framework to help libraries understand where they are in terms of their readiness for evaluation from an organizational culture standpoint. This resource may be of use to library leadership when determining what steps are appropriate for their library to help build in appropriate evaluation activities and build a culture of evaluative thinking.

Potential data collection tools and other evaluation resources

Before collecting any data for evaluation purposes, libraries should prioritize what they hope to learn. There are a number of perspectives to capture through evaluation activities and many different types of programs and services offered. The following section highlights some common perspectives captured and evaluation approaches and common methods used.

Outcomes-based evaluation

Funders and other stakeholders often ask libraries to demonstrate their value. They want to know, for example, does the library meet the needs of its community? What are the benefits of library use? In *Five Steps of Outcome-based Planning and Evaluation for Public Libraries*, Gross et al. (2016) suggests starting the evaluation process with the identification of desired outcomes. This concise book is a guidebook for conducting evaluation that starts with the identification of goals, whether they are at the program or organizational level. The Connected Learning Alliance provides a workbook to help libraries with the process of identifying their program outcomes or goals (Connected Learning Alliance, 2020). Although it was developed to guide the evaluation of connected learning programs for youth, it can be applied to other types of programming. Project Outcome, as mentioned previously, also has tools to help libraries set goals for outcome measurement (Public Library Association, n.d.). Lastly, an evaluation guide for public libraries, recently developed for the Urban Libraries Council, details eight steps of evaluation and includes helpful worksheets, checklists, and other resources to support evaluation in libraries (Goldman, 2021).

Project Outcome has developed standardized measures of effectiveness for users of library services. Any public library can sign up and participate. Project Outcome has surveys for seven areas: civic/community engagement, digital learning, early childhood literacy, economic development, education/lifelong learning, job skills, and summer reading. The surveys capture four outcome-related findings: if a patron 1) learned something, 2) feels confident using what they learned, 3) intends to or has changed, and 4) has increased their awareness of library resources (Public Library Association, n.d.).

Most studies exploring the social impacts or benefits of the public library in a community have relied on qualitative methods (Matthews, 2018). As mentioned previously, a literature review by Rooney-Browne (2011) identified 11 possible impacts and outcomes that contribute to social value (see page 6 for outcomes). Matthews developed

a framework to help public libraries begin to identify both the direct and indirect (social) benefits that arise from the use of the library (Matthews, 2018, p. 409).

IBEC (Information Behavior in Everyday Contexts) also has a publicly available toolkit that walks libraries though outcomes-based evaluation in a step-by-step process providing several data collection tool examples from libraries who participated in the toolkit development (University of Washington, n.d.).

While many public libraries endeavor to measure their social impact, several common challenges are noted by Matthews (2018, p. 409).

- Library initiatives are often not sustained, and "best practices" are not shared

- Increased funding seldom appears for broader definition of the role of the library

- The same activity in different libraries will differ in terms of the number of people served or impacted

- Tools to demonstrate value are difficult to find and use – although this is changing with the Public Library Association's Project Outcome

- Most people find it difficult to estimate the impact of the library on their lives

- It is difficult to draw a causal relationship between the availability of a service and a social impact

- It is difficult to extrapolate the results from several local studies into a broader picture

- It is difficult to arrive at an operational definition of a social impact and an appropriate method for gathering useful data so that the method could be replicated across several studies

- Qualitative data can be difficult and expensive to gather, and the results are often viewed with suspicion

Evaluation of customer service/satisfaction

Service quality is considered antecedent to customer satisfaction. The higher the quality of service, the higher customer satisfaction, according to this theory. Therefore, many libraries focus on assessing customer satisfaction. In fact, it is the most popular and frequently used method of assessment (Matthews, 2018). Satisfaction surveys often ask patrons to compare the quality and utility of library services they experienced with their expectations. To determine satisfaction, libraries often use qualitative data methods as well, such as focus groups, mystery shoppers, and complaints.

Most commonly, libraries will develop their own surveys. A number of library user surveys for adaptation are available via the Internet. Libraries might consider using a single survey question, such as the Net Promoter Score, to measure customer satisfaction (On a scale of 0 to 10, how likely are you to recommend [this organization's product or service] to a friend or colleague?). Priority setting surveys are another way to understand what is most important to patrons. A priority and performance evaluation (PAPE) survey asks the patron to identify priority services and to indicate how well the library is currently doing in each area using a Likert scale.

There are also standardized surveys developed by market researchers and originating from the retail industry that have been adapted for libraries. SERVQUAL compares the expectations of customers and performance using five attributes: tangibles, reliability, responsiveness, assurance, and empathy. LibQUAL+ is an adaptation of SERVQUAL that includes 22 survey questions providing information about the effect of service, information control, and library as place. LibQUAL+ is currently the most popular and widely used assessment tool in academic libraries in the U.S. However, this tool has limitations and would benefit from refinement, clarify of constructs, and redefining scales (Shi & Levy, 2017).

LibSat, an alternative to LibQUAL+, is a continuous, web-based survey that is available 24/7 for library patrons to record their views about the quality of service they receive. LibSat is typically used by public libraries, while LibQUAL+ is more common among academic libraries.

Some libraries use Community Service Excellence (CSE), a generic framework developed by the UK government, to "encourage, enable, and reward organizations that are delivering services based on a genuine understanding of the needs and preferences of their customers and communities" (Atkinson & Walton, 2017, p. 1). This framework focuses on the customer service aspect of an organization and examines areas, in depth, that research has indicated as priority areas for customers (Atkinson & Walton, 2017). These standardized tools may be more sophisticated than many public libraries need, particularly smaller libraries, and may lack the customization desired.

Evaluation of summer reading programs

Matthews (2018, p. 271) identifies best practices for summer reading programs based on prior research and evaluation. Summer reading programs (SRPs) are very common among public libraries. They are most commonly evaluated using quantitative methods; however, qualitative methods can also be used. Qualitative methods used include journaling (students track reading) or open-ended survey questions that examine perceptions of why they read, the benefits of reading, and their perceptions about their skill level (Matthews, 2018). Common quantitative methods include the collection of input measures, output measures, surveys, and pre- and post-tests. Statistical analyses have also been conducted to identify correlation between certain demographics and reading ability, and meta-analysis studies have aggregated information about summer reading programs and the impact on learning. While school-based, home-based, and other out-of-school-time reading programs have empirical evidence indicating that they prevent summer learning loss and improve reading achievement, there is lack of evidence for the effectiveness of public library summer reading programs (Matthews, 2018). Participating in PLA's Project Outcome may help libraries identify and track outcomes for their summer reading program (Public Library Association, n.d.).

Evaluation of teen services

The Young Adult Library Services Association (YALSA) developed a tool for evaluating a library's overall level of success in providing services to teens, age 12-18. The areas for evaluation are derived primarily from a set of competencies developed for library staff around teen programming, *YALSA's Teen Services Competencies for Library Staff*. The evaluation tool lists essential elements by different areas (e.g., leadership and professionalism, knowledge of materials) and descriptions associated with each possible rating (distinguished, proficient, basic, below basic) (YALSA, 2011). This tool could be used as a self-assessment tool or could be used by an external evaluator to evaluate a library's teen services. In addition to this specific tool, YALSA has an evaluation book, *Evaluating Teen Services and Programs: A YALSA Guide*, which may be a helpful resource (Flowers, 2012).

Evaluation of user experience (UX)

User experience is defined as the feelings that result from the use of a product or service or when interacting with others in a physical space. Qualitative methods used to evaluate user experience include observation, interviews, focus groups, journey mapping, and secret shopper. Common quantitative methods include usability testing, floor counts, user surveys, and ethnographic methods (e.g., data from diaries, photos, patron feedback) (Matthews, 2018).

Other less common types of evaluation include evaluation of physical space and the use of social media. Studies indicate library spaces should be adaptive, engaging, transparent, productive, responsive, sustainable, and innovative. These are constructs that libraries might consider measuring when evaluating the physical space

of a library whether for the planning of a new facility or renovating an existing space. Common qualitative methods for the evaluation of social media include focus groups, analysis of comments, variety of content posted, and "voice" of the posts. Quantitative methods might include counts/numbers (e.g., number of likes/comments, number of click-throughs on links, number of real-time conversations) and user surveys (Matthews, 2018).

There are several other service-specific evaluations that public libraries may consider for internal assessments of library systems. Some of these include evaluation of: information literacy, library operations, interlibrary loan, automated systems, and library users and nonusers. Determining where to focus resources can be illuminated through the identification of community needs, organizational goals, and desired outcomes.

State and national surveys and data

Resources are available that can help libraries understand where they stand in comparison to other libraries and that help answer questions about community needs and trends. The Library Research Service lists several state and national surveys that capture a wide range of data from public libraries (Library Research Service, n.d.-a). Participation in many of these surveys is voluntary. Edge Benchmarks, for example, provide a snapshot of the library's current public technology services along with steps to make improvements to better meet the needs of community members. Additionally, the Impact Survey is an online survey tool available to all public libraries. It is designed for public libraries that want to better understand their communities and how people use their technology resources and services. Library Research Service also has a Community Analysis Scan Form that public libraries can complete to examine local demographic data about the population they serve (Library Research Service, n.d.-b). Minnesota Compass is a local source libraries can utilize to answer demographic queries about their service population. Libraries can examine data from the most recent census for specific geographies, including cities and towns, census tracts, and zip codes. The Build Your Own Profile tool allows individuals to draw their own geographic area of interest. These tools can be used to identify community trends, needs, and gaps. This information is particularly helpful for libraries looking to demonstrate their contribution to community impacts.

Toolkit needs

Hurst et al. (2016) investigated the need and high-level requirements for a toolkit to enable library administrators to utilize commonly shared performance indicators and formulas to create their own dashboards. They identified the following common evaluation questions:

Usage/Impact

- Who is not using the library – is there a pattern in time or across demographics?
- Conversely, who is using the library, and what are the usage patterns?
- How effective are our promotional activities?
- Are the right demographic groups using the right resources?
- How does library usage benefit clients?

Collections

- Are we buying the right resources?

- Are the items we are buying being used?

- What is the overall cost per use of electronic versus print materials?

- How many reproduction requests are we getting?

- Are we getting ILL requests for items we already own? Is it because items are not being found via our systems, or because they are not available? If they are not available, are there ways we can make items more quickly available?

- Does it makes sense to lease or borrow, versus purchase?

- How does time-sensitivity of fulfillment of requested item factor into the equation?

Work rate and project management

- How quickly is our backlog growing?

- How long did a specific project take and what was the breakdown of resources: costs for hardware, software, staff resources?

- What is work volume by time of day, day of the week, and time of semester across multiple work areas/functions (e.g., circulation, technical services, reference desk, research consultations, and instructional sessions)?

- What is the staff time and cost per project?

Physical space

- How is our physical space being used, by whom and when?

- How many people are in our reading room(s) on average?

- How frequently are our on-site print collections being used?

- Does frequency of use justify in-library location, or should certain print items be stored off-site?

Financial

- How are we spending our budget? What is the allocation, for example, between application developers and purchased discovery services?

- Guidance for libraries about how to collect this information may be valuable to include in a future toolkit.

Conclusion

There is a need for more research to understand what makes a public library service "high quality." Despite a lack of evidence-based frameworks to guide public libraries in program and service development, several evaluation frameworks and resources exist that can support libraries to conduct evaluation of their services and build their internal evaluation capacity. For many, the first step may be to assess their organizational culture and readiness to embark on evaluation activities. The evaluation frameworks or models, data collection resources, and evaluation guides/toolkits described in this review may serve as a starting point for libraries new to evaluation or assist libraries interested in building out more comprehensive, robust evaluations. Interviews with public libraries across Minnesota will further help us to understand which of these available resources are most relevant and helpful and what is still missing to support evaluation efforts.

Sources

Association of College and Research Libraries. (2018, February). *Standards for libraries in higher education.* https://www.ala.org/acrl/standards/standardslibraries

Atkinson, J., & Walton, G. (2017). Establishing quality in university libraries: Role of external frameworks. *New Review of Academic Librarianship*, *23*(1), 1–5. https://doi.org/10.1080/13614533.2016.1271238

Barchas-Lichtenstein, J., Norlander, R. J., Fraser, J., Fournier, M. D., Voiklis, J., Nock, K., & Danter, E. (2020). Categorizing library public programs. *Library Quarterly*, *90*(4), 563–579. https://doi.org/10.1086/710259

Butler, S., & Diaz, C. (2016, September 14). *Third places as community builders.* https://www.brookings.edu/blog/up-front/2016/09/14/third-places-as-community-builders/

Cabello, M., & Butler, S. (2017, March 30). *How public libraries help build healthy communities.* Brookings Institute. https://www.brookings.edu/blog/up-front/2017/03/30/how-public-libraries-help-build-healthy-communities/

Connected Learning Alliance. (2020). *Evaluating library programming: A practical guide to collecting and analyzing data to improve or evaluate connected learning programs for youth in libraries.* https://clalliance.org/publications/evaluating-library-programming-a-practical-guide-to-collecting-and-analyzing-data-to-improve-or-evaluate-connected-learning-programs-for-youth-in-libraries/

Flowers, S. (2012). *Evaluating teen services and programs.* Young Adult Library Services Association.

Goldman, K. H. (2021). *Evaluation guide for public libraries.* Urban Libraries Council. https://www.urbanlibraries.org/files/KHG-Evaluation-Guide.pdf

Gross, M., Mediavilla, C., & Walter, V. A. (2016). *Five steps of outcome-based planning and evaluation for public libraries*. American Library Association.

Guilford College. (n.d.). Hege Library and Learning Technologies. https://library.guilford.edu/assess/overview

Hallam, G. (2018). Being Evidence Based Makes Sense!: An Introduction to Evidence Based Library and Information Practice (EBLIP). *Bibliothek Forschung Und Praxis*, *42*(3), 453–462. https://doi.org/10.1515/bfp-2018-0067

Hurst, M., Madsen, C., Wilson, F., Smith, M., & Garrity, W. F. (2016). All your data displayed in one place: Preliminary research and planning for a library assessment dashboard and toolkit. *Library Assessment Conference.* http://old.libraryassessment.org/bm~doc/91-wilson-2016.pdf

Irwin, B., & St-Pierre, P. G. (2014). Creating a culture of meaningful evaluation in public libraries: Moving beyond quantitative metrics. *SAGE Open*, *4*(4). https://doi.org/10.1177/2158244014561214

Klinenberg, E. (2018a). *Palaces for the people: How social infrastructure can help fight inequality, polarization, and the decline of civic life.* Broadway Books.

Klinenberg, E. (2018b, September 8). To restore civil society, start with the library. *New York Times*.
https://www.nytimes.com/2018/09/08/opinion/sunday/civil-society-library.html

Library Research Service. (n.d.-a). *Public libraries. Community analysis scan form.*
https://www.lrs.org/public/ca_form.php

Library Research Service. (n.d.-b). *The who what where and why of public library surveys and tools.*
https://www.lrs.org/data-tools/public-libraries/the-who-what-where-and-why-of-public-library-surveys/

Llywodraeth Cymru Welsh Government. (2017). *Connected and ambitious libraries: The sixth quality framework of Welsh public library standards 2017 to 2020.*
https://gov.wales/sites/default/files/publications/2019-07/connected-and-ambitious-libraries-the-sixth-quality-framework-of-welsh-public-library-standards-2017-to-2020.pdf

Matthews, J. R. (2018). *The evaluation and measurement of library services* (2nd ed). ABC-CLIO.

Public Library Association. (n.d.). *Project Outcome.* https://www.projectoutcome.org/

Reference and User Services Association. (2021). *Documents by topic: Standards, guidelines, and recommendations*. American Library Association. https://www.ala.org/rusa/documents-topic-standards-guidelines-and-recommendations

Reid, P. H. (2020). How good is our public library service? The evolution of a new quality standards framework for Scottish public libraries 2012–2017. *Journal of Librarianship and Information Science*, *52*(3), 647–658. https://doi.org/10.1177/0961000619855430

Rooney-Browne, C. (2011). Methods for demonstrating the value of public libraries in the UK: A literature review. *Library and Information Research, 35*(109), 3-39.

Seismonaut and Roskilde Central Library. (2021). *Impact Compass – The impact of public libraries in Denmark: A haven in our community.*
https://www.roskildebib.dk/sites/roskilde.ddbcms.dk/files/files/news/en_brugsguide_06.05.21_0.pdf

Shi, X., & Levy, S. (2017). *A theory-guided approach to library services assessment.* College & Research Libraries. https://doi.org/10.5860/crl.66.3.266

State Library of Victoria. (2011). *Being the best we can: Key results for public library service.*
https://www.slv.vic.gov.au/sites/default/files/Being-the-best-we-can-framework-and-toolkit.pdf

University of Washington. (n.d.). *IBEC outcomes toolkit*. https://ibec.ischool.uw.edu/toolkit.php

Young Adult Library Services Association. (2011). *YALSA teen services evaluation tool.*
https://www.ala.org/yalsa/sites/ala.org.yalsa/files/content/guidelines/yacompetencies/evaluationtool.pdf