

A Study of Early Learning Services in Museums and Libraries

P. Sirinides¹ · R. Fink¹ · T. DuBois¹

© Springer Science+Business Media New York 2016

Abstract Museums and libraries can play a role in providing opportunities for early learning, and there is clear momentum and infrastructure already in place to help make this happen. Researchers conducted a mixed-methods descriptive study to generate new evidence about the availability of services for young children in museums and libraries, and the factors that influence families' participation. The study used interviews, focus groups, secondary data analysis, and a new survey to gather data from museum and library administrators, as well as families. Through this study we find a range of diverse early learning programs in museums and libraries. We also find that even where museums and libraries exist, local community members don't always take advantage of these resources. Families that participated in focus groups expressed a desire to be able to do more hands-on activities with their young children, but face many barriers in being able to access museums and libraries. Although there are efforts to increase the availability and quality of early childhood services in museums and libraries, capacity and expertise to effectively implement and sustain efforts are limiting. To increase the availability, access and benefit of early learning programs in museums and libraries, city and state leaders can facilitate partnerships among museums, libraries, and early learning programs.

Electronic Supplementary Material The online version of this article (doi:10.1007/s10643-016-0820-z) contains supplementary material, which is available to authorized users.

P. Sirinides sirinide@upenn.edu Keywords Library · Museum · Early learning

Introduction

As states, cities, and communities take a more active role in providing young children with high quality opportunities to learn, many are looking to museums and libraries as part of the early education system (Swan et al. 2013). Museums and libraries can play a role in providing opportunities for early learning, and in many U.S. communities, there is momentum and infrastructure already in place to help make this happen.

The educational influence of U.S. museums and libraries is rooted in Colonial America. By the mid-nineteenth century, the expansion of formal schooling overshadowed the educational role of museums and libraries, but their role as important sites of informal learning persisted (Cremin 1980; Sensenig 2010). By the early twentieth century, children's services grew to be a core function of libraries (MacGillivray et al. 2010; Neuman and Celano 2006), and this remains true today. In a 2013 national study by Pew Research Center, families reported that they often visit the library to bring a younger person to an event or program designed for children (41%), and that the primary reason for increased use of library services was to participate in programming for children/grandchildren (26%). Furthermore, African–American and Hispanic families were more likely than White families to say libraries are important to them, their families, and their communities. At the same time, the Pew study also reported that families don't always know about available services at libraries for young children.

Research suggests that early learning services in community-based settings such as museums and libraries support families' engagement with their child(ren) in ways that foster early literacy (Albright et al. 2009). There is evidence that

¹ University of Pennsylvania, 3440 Market St Suite 560, Philadelphia, PA 19104-3325, USA

museums and libraries are well positioned to serve hard-toreach populations because they are often viewed as local, safe, family-oriented spaces where caregivers can spend time with their children (MacGillivray et al. 2010). However, many researchers have called for more evidence on emerging trends and best practices to provide deeper understanding of the impact on young learners of early learning activities in museums and libraries (Bowers 2012; Luke and Windleharth 2013; Munley 2012; Miller 2014; Shaffer 2012; Wolf and Wood 2012). Despite interest in expanding early learning opportunities in museums and libraries, much of the evidence to date on the benefits is based on child development theory that emphasizes the need for stimulating interactions and play-based experiences in a supportive learning environment (Krakowski 2012). In addition to the need for evidence linking services to child and family outcomes, more research is also needed on what motivates families to attend these programs and how to attract new families (Adams et al. 2010).

Considered together, national evidence provides support for the potential of libraries to engage diverse communities in educational programming for young children and their families, although obstacles regarding awareness and accessibility remain (Zickuhr et al. 2013). There has been less research about the availability of early learning opportunities in museums (such as historical houses, science centers, maker spaces, and cultural centers), but these organizations have increasingly demonstrated an ability to thoughtfully create and integrate early learning opportunities into their programming (Swan et al. 2013; Tezcan-Akmehmet and Luke 2013). Today, with many of the nation's school systems feeling overburdened and underfunded, states and municipalities are looking to museums and libraries to play a critical role both in addressing kindergarten-readiness gaps and in providing children and families with access to high-quality learning experiences (Swan et al. 2013). At this time there is a clear need for more information about current availability and accessibility of early learning opportunities in museums and libraries.

Inquiry Methods

This study was conducted in response to the need for new evidence that answers four research questions:

To what extent do museums and libraries offer programs for young children? What is the nature and type of the programming that currently exists?

What are the barriers that museum and library staff face in designing and implementing programming for young children?

To what extent do partnerships support programming for young children in museums and libraries? What additional information and assistance would be useful? What are the experiences of families in under-resourced neighborhoods in accessing programming for young children in museums and libraries?

To answer these questions, we conducted a mixed-methods study combining secondary data analysis with interviews and a survey administered to museum administrators and librarians. Additionally, we conducted focus groups with families located in selected under-resourced communities. These focus groups provided new evidence from families about their use of programming for young children in museums or libraries; the barriers to participation in such programs; and ways museums and libraries might better accommodate low-income families with young children.

Setting

This study has a particular focus on Philadelphia, PA, which is home to a large number of cultural institutions and museums, and takes great pride in its historic libraries and organizations. Nonetheless, there is national evidence of persistent disparities in the availability, quality, and equity of services for young children in museums and libraries (Sin 2011). Public libraries located in lower-income neighborhoods typically have less funding and offer fewer services, and library closings occur at a higher rate in high-poverty neighborhoods than in more advantaged areas (Koontz et al. 2009). For all of these reasons, Philadelphia offers an excellent setting to further explore opportunities for museums and libraries to provide an expanded array of services and programming for young children and their families.

Review of Existing Data

The study began with a data discovery process; several relevant data sets were gathered and reviewed from both public and private sources. Currently, data on museum and library programming and usage is collected for a variety of purposes but these datasets typically lack details about the availability and accessibility of early childhood programming. This may be at least partially explained by the fact that the purposes of the current data efforts were not to answer the types of questions raised in this study, but rather for annual reporting and fundraising. As such, existing data sources do not provide information that would be useful for early learning systems planning, or that would be required to answer the questions raised in this study.

For libraries, the most accessible and useful data are contained within the Public Library Survey, a voluntary national survey coordinated annually by the Institute of Museum and Library Services. These files include directory information and detailed fiscal information about the library staff, operating revenue and expenditures for specific branches and community libraries. The Public Library Survey does not contain information about the types of programs for young children offered, nor details about young children in attendance. The Free Library System of Philadelphia collects some local information on library preschool services, including the number of programs for young children and attendance data. However, these data do not include details on the content of the programs. Finally, the Cultural Data Project collects similar data on the staffing, attendance, operational revenue, and expenses of arts and cultural organizations, with little detail on programs for young children.

The Survey of Museum and Library Early Learning Services

As part of this study, a new survey for museum and library directors was developed and administered by the researchers. The Survey of Museum and Library Early Learning Services focused on eight areas: (1) the extent to which organizational mission focuses on early childhood; (2) programming for early childhood, including barriers to establishing such programming; (3) special populations served or targeted; (4) learning areas addressed through programming; (5) elementary-aged programming; (6) partnerships for designing and implementing early childhood programming; (7) organizational resources, including staffing, dedicated to EC programming; and (8) outreach and communication. The survey can be accessed at http://www.cpre.org/pa-smiles.

The online survey, consisting of both multiple fixedchoice and open-ended questions, was developed through an iterative process with feedback from a pilot group. This process began with five interviews: four with program administrators in three of the city's best-known museums for children, and one with an administrator in the free library system who oversees programs for children. These semistructured interviews were guided by a protocol developed to investigate early childhood programming; implementation issues; the personnel employed to design and implement programs for young children; existing partnerships regarding early childhood programming; and issues around equity of access. Following the interviews, the survey was constructed and then shared again with a range of stakeholders for a final round of feedback and revision.

Designing data collection instruments to investigate early learning opportunities in museums and libraries is challenging because this group of organizations is heterogeneous and difficult to define. The ways that these organizations might think about and describe their programing, attendance, funding, and partnerships is not consistent. Therefore, the survey for museums and libraries needed fairly broad question phrasing that could be interpreted similarly across organization types.

The process of designing and administering the online survey also revealed a lack of available individual email addresses for museum directors and librarians. Contact information via email was not found during any of the data discovery activities. Because of this, researchers could not individually administer the online survey, but rather relied on an open link survey in which respondents were asked to identify the specific organization they represented. Three rounds of informational postcards with the link were sent to all museums and libraries in Philadelphia, along with a mailed paper version with a pre-paid return envelope.

Forty-five of the 53 public libraries in Philadelphia completed the survey for an 85% response rate. Thirty-nine museums completed the survey although the response rate for this group is difficult to calculate because the population is not known and includes a broad range of arts and cultural organizations, galleries, maker spaces, and historical houses. As such, results of the survey may not be representative of all museums.

Community Focus Groups

A total of 40 parents/caregivers volunteered to participate in nine focus groups located in three different under-resourced neighborhoods across the city (see Fig. 1). The focus groups were guided by a protocol designed to talk with families about the extent to which they attended any programming for young children in museums or libraries, the barriers they encountered or perceived in bringing their young children to these places, and how museums and libraries might better accommodate families with young children. The focus groups were all audio recorded, transcribed, and then reviewed by the research team. While listening to the recordings, the team took notes organized by the protocol questions. Additional themes unrelated to the protocol questions were also recorded in the notes which were then summarized to integrate with interview and survey data.

Findings

Responses from the survey revealed a range of perspectives, services, and available resources within and among museums and libraries. The following table presents response data for the fixed-choice-response questions from the survey, separately for museums and libraries. Some of the survey questions were follow-up questions (e.g. "If yes, how often do you...") and the percentages in the table are only for the subset of respondents as applicable. The findings related to the first three of four research questions are summarized below (Table 1).

Research Question 1: To what extent do museums and libraries offer programs for young children? What is the nature and type of the programming that currently exists?

Individual public library branches were more likely than museums to say that providing programming for young children and their families was central to their organization's

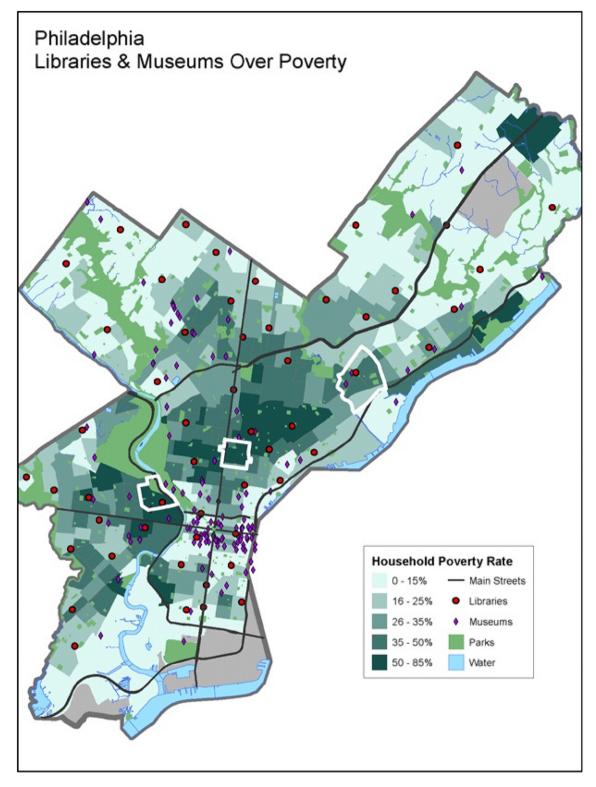


Fig. 1 Survey results for museums and libraries

missions. Available programming in both settings focused on traditional early learning activities such as story time and arts and crafts, while incorporating hands-on and movement experiences as well. Nearly all libraries reported that working with young children was part of their organization's mission, while less than half of museums said the same. When asked about specific populations of young children (birth to age five) and families

Table 1 Survey responses for libraries and museums

	Libraries	Museum
Respondents	45	39
Response rate	85%	N/A
Programming for young children (birth to age five) and their families		
Is working with young children part of your organization's mission?	100%	44%
Does your organization consider this a core service?	98%	26%
In the past 12 months, has your organization offered any programming?	98%	56%
If yes, how often do you offer programming for young children?		
Less than once a month	4%	41%
Once a month	2%	9%
2–3 times a month	17%	5%
Once a week	33%	14%
2–3 times a week	36%	9%
Daily	7%	23%
Do you plan on offering programming for young children in the future?	96%	59%
Programming for early elementary children (Kindergarten to Grade 3)		
Is working with early elementary part of your organization's mission?	100%	62%
In the past 12 months, has your organization offered any programming?	100%	74%
If yes, how often do you offer programming for elementary children?		
Less than once a month	4%	26%
Once a month	7%	7%
2–3 times a month	11%	7%
Once a week	18%	11%
2–3 times a week	24%	15%
Daily	36%	33%
Please check any/all of the following key learning areas that have been addressed by your organization's programming		
Approaches to learning through play	77%	48%
Language and literacy development	82%	31%
Mathematical thinking and expression	23 %	14%
Scientific thinking and technology	23 % 73 %	28%
Social studies thinking	34%	48%
Creative thinking and expression	73%	5%
Health, wellness, and physical development	36%	17%
Social and emotional development	41%	34%
Partnerships	11/0	5470
Do you receive information from other organizations about designing and/or providing services for young children (birth to age five)?	50%	19%
If so, please rate the usefulness of the information that you have received		
Not at all useful	9%	0%
Somewhat useful	55%	71%
Very useful	36%	29%
Are you in partnership with others to actively plan and/or implement services for young children (birth to age five) and their families?	61%	21%
If so, please rate the importance for your ability to provide those services		
Not at all important	7%	0%
Somewhat important	37%	25%
Very important	56%	75%
Does your organization work in any way with hospitals, clinics, or health centers regarding services for young children and their families?	22%	3%

	Libraries	Museums
Does your organization interact with the Pennsylvania Department of Education in any way that informs your early childhood programming?	41%	21%
Staff		
Is there dedicated staff within your organization with responsibility for planning and/or implementing services for young children?	98%	37%
If yes, is working with young children her/their primary responsibility?	76%	21%
Data use		
How often does your organization collect and review data to assess the needs of young children and families in your	community?	
Never	26%	62%
Less than once a month	28%	32%
Once a month	28%	3%
Daily or weekly	18%	3%
How often does your organization collect and review data related to young children (birth to age five) and families the	nat attend your	programs?
Never	14%	59%
Less than once a month	2%	24%
Once a month	55%	12%
Daily or weekly	29%	6%

that are considered when designing and offering services, preschoolers were mentioned most often, with toddlers slightly less often. Only 14% of all survey respondents identified infants as a population that is considered, while 30% mentioned toddlers. Only 11% identified bilingual/dual language learners as a population which they target. Other special populations listed by survey respondents included families in transitional housing, single parents, children in child care, homeschoolers, and children in speech therapy.

Table 1 (continued)

In terms of the types of programming offered, libraries most often mentioned story time, while museums mentioned a range of activities including adapting current exhibits, offering summer programs, and hosting special annual events. Overall, the two most common activities cited were story time and crafts, followed by play spaces; each are described below.

Story times were described by survey respondents both as year-round and summer literacy activities. Story times often had specific themes such as seasons, holidays, and insects. Some libraries also hosted special guests, such as authors, connected to story time. Most of these activities were geared to toddlers and preschoolers, although one library indicated it offered a baby lap-sit story time for children up to 15 months old—and many included rhymes, songs, and literacy tips for adults.

Another common activity for young children mentioned by survey respondents was arts and crafts. Several respondents noted that the focus of these types of activities was on children and caregivers working together. The content ranged from crayons and scrap paper to culinary classes and origami. Art activities often were provided in partnerships, such as classes through a local museum. A less frequently mentioned activity for young children was provision of play spaces. These typically included developmentally appropriate manipulatives such as bead mazes, simple puzzles, lacing cards, dollhouses, dolls, Legos, Duplos, magnetic tiles, train and car sets, wooden blocks, and finger puppets. One respondent mentioned a rotating set of dramatic play materials for independent and group play.

Survey responses also revealed a diverse range of early learning services. Music and motion were mentioned, often together, such as engaging in songs with movement activities; toddler and preschool sessions for action rhymes; movement story time; Zumba for preschoolers; karaoke; a sing-along with a performer who specialized in interactive music for children; and kid-friendly yoga. A few survey respondents indicated programs that focused on nature/animals with an outside specialist that came to the facility, two of which were animal handlers who presented live animals to help children learn about habitats and behaviors. Other types of activities mentioned included a STEM program for homeschoolers in the fall and spring, a puppeteer provided by a local university, a magician, and several outdoor family festivals.

When asked about programming being considered for the coming year, the majority of respondents (59% of museums and 96% of libraries) said they plan to offer programs and activities for young children in the future. For most, this entailed continuing or increasing participation for current programs, as well as enhancing collection of materials. Some said they would like to bring back programming that has been discontinued because of lack of funding, especially with a focus on STEM (such as Lego Robotics, and hosting science-themed traveling shows). Other programming being considered included baby lap-sit story time; bilingual story time (in Spanish, Italian, and Cantonese); the city reading program, which encourages families to read with young children; more play-based programs (such as block play and outdoor activities, such as stories with sidewalk chalk); and adapting play materials for children with sensory special needs.

Research Question 2: What are the barriers that museum and library staff face in designing and implementing programming for young children?

Lack of funding and resources was the major barrier preventing museums and libraries from providing more learning opportunities for young children and their families. Museums that did not offer programs for young children and their families cited several barriers, many related to inadequate funding for both programming and staffing. Additionally, lack of knowledge and experience with developing and implementing early childhood programming and the perception that the museum's content focus was inappropriate for young children were also frequently mentioned by museum administrators as barriers to providing more programming for young children. When asked how lack of funding affects decision about services for young children (birth to age five), many strongly cited a need for funds, most importantly, to have adequate and qualified staff.

Lack of funding equals lack of staff which equals lack of programming.

Funding and lack of funding is the greatest factor in our ability to provide service to young children and families. Our services including literacy programming, are made possible by qualified staff. We have been short staffed since 2008 and our programming has been greatly impacted.

Lack of funding for staff seriously hinders our ability to consistently serve our patrons. Last week the branch where I work did not have enough staff to open. Both my preschool story time and an adult literacy study group were canceled. It is difficult to plan programs when lack of staff forces last minute closures. Often staff at my library are called to work in other branches to keep them open. This means the staff here (and there) is stretched thin. Lack of staff is my number one concern.

Other survey respondents, who did not mention staffing as an obstacle, expressed that there were opportunities to provide programming without much more additional funding.

Having funding to purchase supplies for programs for this age group is not absolutely essential, but it does help us to provide better quality. For example, having shaker eggs for the children to use during story time gives them a quality sensory experience. Having money to buy manipulatives for children to use before and after story time, and when they are in the library in general, offers them more options beyond sitting quietly and "reading books", which they may not be ready to do for long periods.

Many programs for young children do not require money to run, like storytelling programs. When money is available, I can hire outside performers to do music programs or craft programs.

One librarian praised the support that her branch receives from an outside group, something that she concedes is not available to everyone.

We have a strong Friends group at our branch. They provide additional funding for materials and programming. This REALLY helps. Some of the branches do not have the support of a Friends group.

Overall, survey data indicate adequate funding and staffing are inextricably linked to one another as well to an organization's ability to provide services and programs to young children and their families.

Research Question 3: To what extent do partnerships support programming for young children in museums and libraries? What additional information and assistance would be useful?

Information was gathered on the survey about the scope and reach of successful partnerships for implementing services for young children. Survey data indicated a limited number of partnership activities that support early learning programming (21% museums and 61% libraries). Although few museums reported partnerships for young children, the museums that did report partnerships found them to be very important for providing services. Specifically, partnerships provided valuable information (i.e. sharing of program content, advice on serving children and families with special needs, and advice on how to access resources), as well as implementation support (i.e. shared use of facilities, professional development opportunities). The most common partnerships reported for both museums and libraries were with local schools and child care providers. Only a few other organizations were listed as partners by more than one respondent.

Survey respondents were also asked to identify areas where they felt partnerships would be particularly useful for offering programming in the future. Four themes emerged, each of which are described below, including: (1) materials/activity kits; (2) training on early childhood and best practices; (3) support for community outreach and local networking; and (4) push-in support for implementing programs. The survey did not ask for information about partnerships that were unhelpful and future research should explore the extent to which partnership efforts may have only limited success.

The most prevalent type of partnership support request was for kits with pre-made activities and accompanying materials. Several respondents already used kits for preschool science, literacy and art. These kits were often developed and provided by local organizations such as larger museums. Having access to age-appropriate learning programs that can be implemented by staff without expertise in early childhood was often discussed as being essential to be able to offer children's programming. Because increased funding for supplies and staff was not a realistic expectation, some expressed that low-cost or free pre-made activities were needed.

A second type of partnership support that was requested was training for staff about early childhood and best practices. Some respondents noted the value of having received information and tips to enhance the quality and age-appropriateness of activities for young children, as well as information about serving young children with special needs. Many respondents requested training in early childhood education and hands-on workshops presented by people in the field with suggested methods to expand their activities and cover more areas of knowledge and learning. One potential provider of this type of training and support is the state department of education. However, when asked specifically about working directly with the state department of education, very few respondents reported partnering (21% of museums and 41% of libraries).

Additionally, partnerships were discussed in terms of connecting with local community groups and businesses. While for some, local partnerships with schools and child care providers were very important, many did not report having supportive local partnerships and requested help in connecting with preschools, elementary schools, and health care providers. Very few respondents reported partnering with health organizations (22% of libraries and only one museum). Two local universities have partnerships with the public library system to provide health information programs. One library works with a neighborhood health center to cross-promote their services and provide reading rooms and storytelling while children wait for their appointments. Many also discussed the need for local partnerships in terms of connecting with families. Museum and library directors requested information on how to cultivate interest among underserved populations and low-literacy households as well as how to tailor offerings to best meet their needs and interests.

A fourth area identified by respondents was push-in support to implement activities with young children. One respondent described how a local dance studio comes and leads a monthly story-time that incorporates music and movement. Others described similar partnerships with groups that regularly come and facilitate activities with the children, including in multiple languages. To address gaps in staffing and expertise, many expressed interest in hosting early childhood activities that are planned and implemented by someone else with specialized expertise. Especially among museums and libraries with limited staff, partnerships that provide direct implementation support were viewed as necessary to be able to offer broad spectrum of early childhood programs.

Overall, the limited number of existing partnerships provide new ideas for expanding activities and enhancing the quality and age appropriateness of services. Most survey respondents requested information on and assistance in forging new partnerships.

Research Question 4: What are the experiences of families in under-resourced neighborhoods in accessing programming for young children in museums and libraries?

In order to better understand families' experiences with and perceptions of museums and libraries, focus groups composed of parents/caregivers with young children were convened in three different under-resourced neighborhoods across the city. Participants were given the opportunity to share their experiences taking their young child(ren) to museums and libraries. Additionally, participants shared the obstacles they face in being able to access programs in museums and libraries more often. Data provides insights into how families experience and perceive programs for young children in their neighborhood museums and libraries in response the final research question.

Overall, participants reported more experiences in libraries than in museums, but many expressed a desire to be able to attend museums more often with their young children. Focus group participants shared positive experiences of taking their young children to the library to exchange books, but spoke much less frequently about attending specific programming in the library. Some also felt that their local library branch was out-of-date and generally unwelcoming.

It's dark. It's kind of old-fashioned. They need to close it and [refurbish it] – they've done it to all the other ones.

Sometimes we'll use [the local library branch] but other times we'll go to the main library branch down on Finley Street because it's bigger, has more space, does more different things. So like as far as different – you had to really kind of look around, it's not just this specific community, you've got to sometimes branch out.

Conversely, focus group respondents had positive perceptions of museums, but they faced many obstacles in accessing these places including, money, time, and transportation.

Families did discuss local museums as places where they can take their young children for enriching learning experiences. Participants said there were many great opportunities for young children in the city, including many of the better known ones, but that families faced a range of obstacles preventing them from regular access. There were three consistent factors families cited that influenced their ability and willingness to take their young children to museums and libraries; those were (1) accessibility, (2) interactions with staff and facilities, and (3) opportunities for hands-on activities.

Accessibility

Most of the focus group participants identified themselves as working parents and therefore had limited opportunities to take their children places during the week. One participant said she doesn't get home until after 6:30, making the possibility of taking her young child somewhere during the week unrealistic.

In all fairness now we're service and working parents... so getting there, not so much just the time inside the center but times they open and close. Even like during a weekday, they close at six, well we close at six [too]. yeah, and at Saturday it's packed.

They might only have, an activity, it might only be specific to one week, you know, and you might not get a chance to get down there, you know, between working and then the kids and their activities and schools and whatnot. So it be like mainly accessibility, like I say, not only financially but time constraints.

Another participant commented on the amount of activities and events in other parts of the city, but that she wanted things in her neighborhood that she could come home from work and then walk to.

I don't want to have to always look around another neighborhood, I want to go in my neighborhood and find things that are for me that's comfortable time wise and things like that, because getting to them is an issue.

You know I'm just saying like a lot of neighborly, friendly things because I know from my experience before I was traveling on with more than one childit's expensive to travel, just to get into the places.

Many participants discussed spending a lot of time with their children in local outdoor spaces such as playgrounds and parks. Many reported that they liked taking their children to local outdoor spaces because they were often within walking distance of their home, because neighborhood parks and playgrounds are free, and because these are places where their young children can be active and loud. Some participants expressed concerns about parks and playgrounds because of safety issues such as broken glass or other adults who may be acting inappropriately. Participants in each neighborhood also referred to recreation centers as places where they are able to take their young children. While not all recreation centers offer programming for young children, at least some centers had outdoor spaces for young children. Others mentioned arts and crafts activities (i.e., finger painting) offered at recreation centers. The Police Athletic League center was mentioned as a positive place for children to interact with police officers.

For this study, researchers conducted a spatial analysis using address data for museums and libraries along with Philadelphia residential parcel data. Although there are more than three times the number of museums, libraries are more dispersed throughout the city. We calculated the average distance from a land parcel to the nearest library to be 0.55 miles, while the average distance to the nearest museum is 0.75 miles. It is unclear if there is a threshold for defining accessibility or the extent to which it varies based on family and neighborhood characteristic. Nevertheless, the greater average distance to a museum is consistent with accessibility challenges expressed by families.

In addition, and related to the barriers of time and location is the cost of admission. The price of admission, especially for families with multiple children, was said to be generally too high. One participant mentioned that she could only do things like that with her children on weeks that she gets paid.

[Bringing my child to a museum] has to be the weekends. And then it needs to be on the pay period also.

Many focus group participants asked about discounts for people in poverty, on food stamps/welfare or who live in particular neighborhoods. For many families, limited access to museums simply came down to not being able to afford the fees for admission. Families without their own mode of transportation have to take public transportation which takes additional time and also costs money. Families explained that once they paid for train or bus fare for multiple children and then thought about admission to the museum, that this was just not a feasible option for them.

Overall, families described several obstacles to accessing the city's museums with young children. Public libraries are local, but posed different access challenges for families based on hours of operation. The most frequent challenge to families for patronizing libraries was the that the hours seem to change and that some branches are not open any night during the week, making getting there regularly quite difficult.

Interactions with Staff and Facilities

Participants reported that some libraries were not welcoming places from the outside. Some families said they walked by

libraries, but would never think of them as a place that was welcoming for children. Some said that their neighborhood branch was not well-kept, was dimly lit, or was not welcoming to patrons with strollers (i.e., no way to get the stroller in to the library). A participant mentioned that the library building gives the appearance that it is always closed.

Honestly, I live right down the street from the library and it's like you don't know anything about it... I'm just saying stuff to make the kids like oh, I want to go in there, or I want to do that. Somebody waving. You know how you see a mascot driving - That would be cool, a library mascot.

Some participants did not go certain places because they felt like all children were not being supervised appropriately. Families emphasized the need for adequate staff and, ideally, someone that had experience with and knowledge about working with young children.

The parents don't feel as welcome when they come. We're sitting there trying to find the activity, but these kids are excluded because he's one and he's crying, well, find something for them to do, mommy, he's trying to distract them. It's like they don't understand their age group, you know, they're just trying to do I guess a service, but they don't understand these children are one [year old].

Some participants expressed that they do not believe that the library is a place for young children. This was sometimes based on past negative experiences that families had with their children in a library, and therefore they did not visit with their children on a regular basis. Other participants discussed positive interactions with the libraries, some commenting that the librarians at their local branch knew their children when they came in and that that was a good feeling. Focus group participants, who did take their children regularly to the library, talked mainly about going to the library in order to exchange books, rather than spending much time there. However, they felt that the experience of returning and checking out books was good because it gave the children responsibility for taking care of the books and bringing them back on time.

I think my son for the library, he thought his library card was like an ID, so he wanted a wallet for it, he was like three so he pulled it out, library card, and it made him feel like he's on top of the world. And he was so excited just to go get a book, so I was like happy for him. Like – that's so good.

His school took him and they gave him a new one, so he came home and like, 'Mom I got a library card, you've got to take me to the library.' I was like – going to take you one day this weekend when I'm off. At the same time, some lamented that turnover was high among librarians and that once they had a good librarian and got to know that person, that person would be gone. Some participants liked that the library was a place to engage with kids and spend time with them, while others wanted more staff involvement for activities.

Opportunities for Hands-on Activities

Focus group participants shared experiences of attending programs or activities that were intended for young children, but required children to sit and listen for extended periods. Families said they needed planned activities where their children could be more actively engaged. Several focus group participants talked about the library as not being conducive to little children who want to touch everything, put things in their mouths, and be active.

It's not really geared towards your children's age, you know they say it is, it's not really because it's a lot of waiting and you kind of feel uncomfortable being in there because you kind of have to say, 'Well, don't touch this, or don't run over here or don't – you know what I mean?

They could offer a lot of more sensory activities, that a lot of the children that interact and grab and you know, feel, touch and smell and – because a lot of the activities they do provide don't be that type.

In order to encourage families to visit libraries more often, some participants suggested a separate room or cordoned off space where young children could play and be active. Another suggestion was to have a specific time designated for young children, so that families would know other families would be there and that young children were welcome. Many participants requested more hands-on materials and activities in the libraries. Participants often mentioned that when they did go to the library they would take their children to the central library rather than to their local branch because of the large children's area and staff. Some said they only went to that one because their local branch did not have the same types of resources.

[My children] kind of like the poke and pry and look at things and try to figure out how they work. Even the younger ones, they might get a little more handsy and mouthy with it but they actually like to participate in things like that, broadening their horizons and show them different things.

Similar recommendations were made for museums. Families said that almost anything they would want to take their young children to needs to be "hands-on." Focus group participants explained that it was difficult taking their children places where they are expected not to touch things. This ends up making the visit stressful for the caregiver if they need to be constantly on top of their children. Even in places where there are some opportunities for hands-on activities, this can still be challenging because the children do not know what they are allowed to touch and not touch. Because of this, participants shared their wariness about places that did not have proper supervision and that required the caregiver to be on constant watch over their children.

Build Capacity and Expand Access to Early Learning Programs Through Partnerships

In light of research emphasizing the importance of young children's experiences outside of the formal school day, museums and libraries are well-situated in a critical space for providing enriching activities and programming for young children and their families. These institutions have a unique local presence and capacity to promote learning opportunities in both urban and rural communities where there are concentrations of at-risk children. For these reasons, it is important to understand what is being done to strengthen and coordinate early learning opportunities in museums and libraries.

Currently, there is a general lack of data related to the availability and accessibility of early childhood programming in museums and libraries. The survey designed as part of this study begins to fill this void. Through this study we find a range of early learning activities that are independently developed and implemented in museums and libraries. Museum and library administrators hold a range of perspectives on their roles in supporting young children and families. We also find that even where opportunities for early learning in museums and libraries exist, community members don't always take advantage of these resources. Families that participated in focus groups expressed a desire to be able to do more hands-on activities with their young children around the city, but that they face many barriers in being able to access museums and libraries. While there is broad interest in increasing the availability and quality of early childhood services in museums and libraries, capacity and expertise to effectively implement and sustain efforts are limiting. This study found that museums and libraries seek partnerships that offer much needed implementation capacity, guidance in using age-appropriate best practices, access to specialized learning activities, and support for local community engagement. To increase the access to and benefit of early learning programs in museums and libraries, city and state leaders can facilitate partnerships among museums, libraries, and early learning programs.

References

- Adams, M., Luke, J.J., & Ancelet, J. (2010). What we do and do not know about family learning in art museum interactive spaces: A literature review. *Engage*, 25, 19–30.
- Albright, M., Delecki, K., & Hinkle, S. (2009). The evolution of early literacy. *Children and Libraries*, 7(1), 13–18.
- Bowers, B. (2012). A look at early childhood learning in museums. Journal of Museum Education, 37(1), 39–48.
- Cremin, L. A. (1980). Changes in the ecology of education: The school and the other educators. *The Future of Formal Education*, 18–29.
- Koontz, C. M., Jue, D. K., & Bishop, B. W. (2009). Public library facility closure: An investigation of reasons for closure and effects on geographic market areas. *Library and Information Science Research*, 31(2), 84–91.
- Krakowski, P. (2012). Museum superheroes. Journal of Museum Education, 37(1), 49–58.
- Luke, J. J., & Windleharth, T. (2013). The learning value of children's museums: Building a field-wide research agenda. Retrieved from Association of Children's Museum website: http://www.childrensmuseums.org/images/learning-value-of-childrens-museumslandscape-review.pdf.
- MacGillivray, L., Ardell, A. L., & Curwen, M. S. (2010). Supporting the literacy development of children living in homeless shelters. *The Reading Teacher*, 63(5), 384–392.
- Miller, J. (2014). Emerging Practices: Early Learning Experiences in Art Museums (Doctoral dissertation, University of Washington).
- Munley, M. E. (2012). Early learning in museums: A review of literature. Prepared for Smithsonian Institution's early learning collaborative network and Smithsonian Early Enrichment Center. Retrieved from Smithsonian Institute website: https://www. si.edu/Content/SEEC/docs/mem%20literature%20review%20 early%20learning%20in%20museums%20final%204%2012%20 2012.pdf.
- Neuman, S. B., & Celano, D. (2006). The knowledge gap: Implications of leveling the playing field for low-income and middle-income children. *Reading Research Quarterly*, 41(2), 176–201.
- Sensenig, V. (2010). Reading first, libraries last: An historical perspective on the absence of libraries in reading education policy. *Jour*nal of Education, 191(3), 9–18.
- Shaffer, S. (2012). Early learning: A national conversation. Journal of Museum Education, 37(1), 11–16.
- Sin, S. C. J. (2011). Neighborhood disparities in access to information resources: Measuring and mapping US public libraries' funding and service landscapes. *Library and Information Science Research*, 33(1), 41–53.
- Swan, D. W., Grimes, J., Owens, T., Vese, R. D. Jr., Miller, K., Arroyo, J., & O'Shea, P. (2013). Public libraries in the United States survey: Fiscal year 2013. Washington, DC: Institute of Museum and Library Services.
- Tezcan-Akmehmet, K., & Luke, J. J. (2013). Museums and parent involvement: A landscape review. *Museum Management and Curatorship*, 28(5), 491–507.
- Wolf, B., & Wood, E. (2012). Integrating scaffolding experiences for the youngest visitors in museums. *Journal of Museum Education*, 37(1), 29–38.
- Zickuhr, K., Rainie, L., & Purcell, K. (2013). Library services in the digital age. Prepared for the Pew Internet and American Life Project. Retrieved from the Pew Research Center website: http:// libraries.pewinternet.org/files/legacy-pdf/PIP_Library%20services_Report.pdf.