

Study conducted by

Rockman et al

Research & Evaluation An employee-owned company

In collaboration with:

Association of Children's Museums
Above and Beyond Children's Museum
Bay Area Discovery Museum
Chicago Children's Museum
Children's Creativity Museum
Children's Museum of Saratoga
Children's Museum of Sonoma County
Explora
Habitot
Kansas Children's Discovery Center
KidZone Museum
Minnesota Children's Museum
Peoria Playhouse Children's Museum
The Children's Museum of Indianapolis

EXECUTIVE SUMMARY

In response to the ongoing COVID-19 pandemic, researchers at Rockman et al, an independent evaluation firm that specializes in the evaluation of museum-based programming and exhibitions, partnered with stakeholders at children's museums across the US to develop a survey that could capture timely information from members and patrons on preferences for virtual programming. During a three-month period, 1253 survey responses were collected with the help of thirteen participating museums. Survey results indicate that interest in virtual programming is linked to families' current schooling and out-of-school care situations. Parents of children attending in-person school or daycare expressed less interest in virtual programs than those who attend school online, which begs the question: What role will museum-based virtual programming have in a post-pandemic learning environment?

Parents seek programming that is developmentally appropriate and provides for safe socialization opportunities with other children. Those with greater interest in virtual programs wanted to provide their child with a diversity of meaningful, multi-discipline educational experiences, recommending an average of no more than 30 minutes per activity. Those less inclined to participate were most concerned about their child's attention span, the appropriateness of online programing for younger children, and excessive screen time—a warranted concern, given that the majority of parents of children ages 7 and up said their child already gets more than 3 hours of screen time on a daily basis.

Parents indicated a strong preference for online programs that require active participation rather than passive experiences. This was especially true of parents whose children are attending school virtually. Parents were interested in programs that align with in-school learning, but even more interested in programs on topics outside of what their children are getting from school. A majority of parents (57%) indicated they would pay for virtual programming meeting these criteria. There was also a preference for weekend programming that children can do independently or together as a family.



ABOUT THE SURVEY

Primary Contributors:

Scott Burg, Senior Researcher Claire Quimby, Research Associate Nisaa Kirtman Research Associate

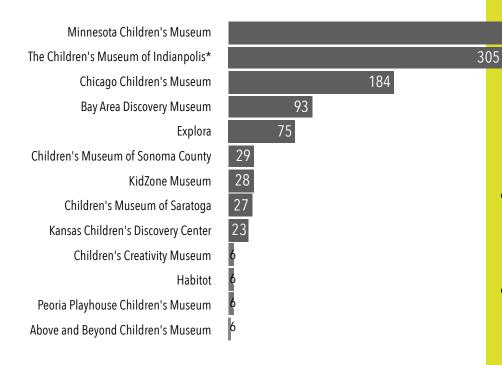
For more information, visit www.rockman.com.

In the fall of 2020, Rockman et al approached the CEO at the Children's Creativity Museum to inquire about opportunities to administer a survey on behalf of Bay Area children's museums to learn more about views on virtual museum programming for children. Survey questions were developed in collaboration with museum CEOs and addressed respondents' preferences for museum-led programming—both content and format—as well as demographic information about respondents and information on current schooling and out-of-school care experiences.

Seeing the potential value of this survey to museums on a nationwide level, evaluators contacted the Association of Children's Museums (ACM) to open the study to any interested ACM members in locations throughout the United States. Twelve museums participated by distributing the online survey to their members and patrons, collecting a total of 949 responses. Additionally, The Children's Museum (Indianapolis) incorporated a subset of the survey items into an internal study and shared the results, expanding the sample on these items to 1253 responses. Data collection occurred between November 2020 and January 2021.

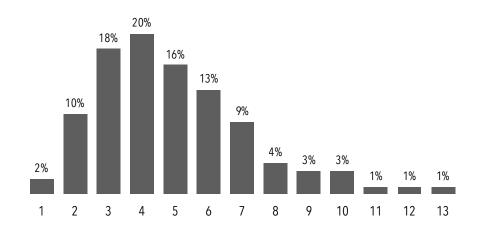
Who were the survey respondents?

RESPONDENTS' AFFILIATION BY MUSEUM



^{*} The Children's Museum of Indianapolis administered a small subset of survey items.

PERCENTAGE OF RESPONDENTS BY CHILD'S AGE



Less than 0.1% of respondents had children ages 14-17.

CURRENT SCHOOLING AND CARE SITUATION

- 35.2% of respondents have children that currently attend in-person daycare or school.
- 27.7% of respondents have children that currently attend daycare or school online (virtually).
- 21.0% of respondents homeschool their children or care for their children at home.
- 10.3% of respondents have children that currently attend a hybrid daycare or school (i.e., a combination of inperson and virtual)

n = 948

5.5% of respondents left this question blank - primarily parents of young children (4 and under).

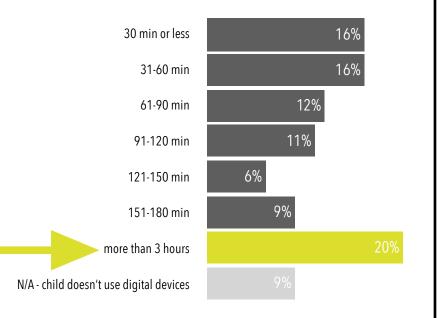
Online Time Trends

Respondents were asked to indicate how much time their child typically spends online on an average day. Responses indicate a high percentage of respondents' children are spending a large amount of time online each day.

20% of respondents' said their child spends 3 hours or more on the computer or other digital devices each day.

TIME ONLINE (% OF RESPONDENTS)

n = 947





How would you rate your internet access?

78%

20%

10%

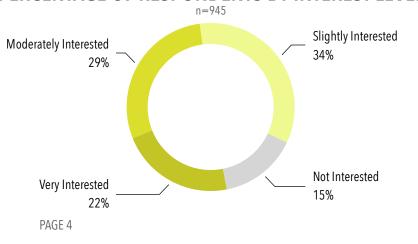
0.3%

Excellent Good Fair Poor

Interest in Virtual Programs

Respondents were asked to rate their level of interest in virtual museum programming and activities geared toward children. Just over half of respondents were *very to moderately interested* in virtual programming.

PERCENTAGE OF RESPONDENTS BY INTEREST LEVEL



WHAT DO PARENTS WANT NOW?

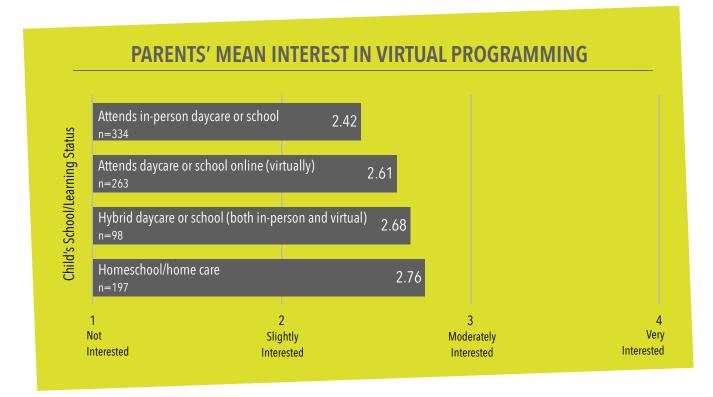
The Influence of School Status on Parents' Interest in Virtual Programming

Findings suggest that parents whose children attend in-person school or daycare are significantly less interested in virtual programming compared to parents of children who are home-schooled, in hybrid school/daycare, or attend school or daycare online.

Independent-samples t-tests were conducted to compare average mean levels of interest in virtual programming for parents with children who were either: (a) attending in-person daycare or school, (b) Attending virtual daycare or school, (c) attending hybrid daycare or school, or (d) homeschooled/receiving care at home. There was a statistically significant difference



in mean levels of interest between parents whose children attended in-person daycare/school (M=2.42, SD=0.98) and those whose children were homeschooled (M=2.76, SD=0.99); t(529)=3.82, p<0.001. Results also showed significant differences in interest between parents whose children attended inperson schooling (M=2.42, SD=0.98) and those whose children attended hybrid schooling (M=2.68, SD=1.0); t(430)=2.33, p<0.05, as well as significant differences in interest between parents whose children attended in-person schooling (M=2.42, SD=0.98) and those whose children attended school or daycare online (virtually) (M=2.61, SD=0.99); t(595)=2.34, p<0.05.



What drives parents' interest in virtual programming?

The social and physical restrictions precipitated by the pandemic have parents searching for diverse activities that foster creativity and provide opportunities for their children to think critically and engage with the world. Even those who indicated they were *slightly interested* in virtual programming appeared willing to sample these kinds of activities with their children.



EXPLANATIONS GIVEN BY THOSE "VERY INTERESTED" IN VIRTUAL PROGRAMMING

n = 207



"We'll take anything in these quarantine times, and The Children's Museum is very thoughtful in their programming so I imagine a digital component will be excellent."

(Parent to 2-year old that is homeschooled, Minnesota)

Parents' interest is largely driven by a desire to see something **new/different** in virtual programming

61%

WHAT DO PARENTS WANT NOW?

Why aren't some parents interested in virtual programming?

Parents are concerned that their children are already spending too much time online during the pandemic. Some parents wondered whether their young child had the adequate attention span or engagement skills to participate in

online activities. For some parents, there was a fear that a dependency on digital platforms for even informal learning might exacerbate the lack of in-person socialization so important for young learners.



EXPLANATIONS AMONG THOSE "NOT INTERESTED" IN VIRTUAL PROGRAMMING

n=145

Too much screen time already; want screentime minimized

56%

Child too young for virtual programming; hard for them to engage

14%

Parent prefers in-person, interactive learning rather than virtual

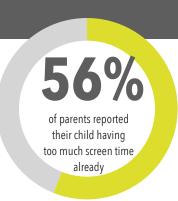
12%

Hard to engage due to short attention span (hard to focus, loses interest)

10%

"She already spends a LOT of her time on screens, we don't need any more screen time."

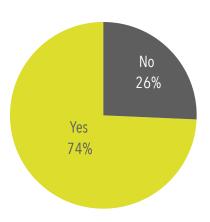
(Parent to 5-year-old who attend hybrid schooling, Chicago)



What programs are parents interested in?

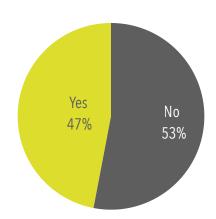
PROGRAMS THAT SUPPLEMENT CHILD'S SCHOOL/DAYCARE LEARNING

n=910



PROGRAMS FOR PARENTS ON HOW TO SUCCESSFULLY FACILITATE AT-HOME LEARNING FOR CHILDREN

n = 894



91%

Of parents are interested in programs outside of school subjects. $\begin{array}{c}
 \text{n} = 928
\end{array}$

Many parents expressed an interest in programs that supplement in-school learning, but even more expressed an interest in programs on topics *outside* of school subjects. They want virtual programs that break from the routine, allow for practice of new skills, are age-appropriate, and provide stimulation from the isolation and repetitiveness of life in lockdown.

Programs generating MOST interest

(average score, where 1=no interest, 4=very interested)

| STEM learning (science, technology, engineering, math) | 3.41 |
|--|------|
| Arts and humanities (e.g. visual and performing arts, new media) | 3.34 |
| At home science-experiments or building activities | 3.28 |

Programs generating LEAST interest

(average score, where 1=no interest, 4=very interested)

| Read alouds/ virtual story time | 2.66 |
|--|------|
| Recurring programs that encourage repeat attendance | 2.53 |
| Programs that focus on basic concepts 2.2 and study habits | 4 |

Interest in specific virtual program topics and formats

Parents were very to moderately interested in virtual programs that emphasized experimentation, hands-on learning, creativity and exploration, STEM, the arts and humanities, movement and exercise, and literacy-based activities. There was less interest in more sedentary activities such as read alouds or programs focusing on developing study habits.



PROGRAM TOPICS

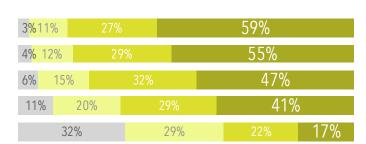
STEM learning (science, technology, engineering, math)

Arts and humanities (e.g. visual and performing arts, new media)

Literacy-based activities

Social emotional skills (e.g. sharing, building positive habits)

Programs that focus on basic concepts and study habits



slightly interested moderately interested very interested

PROGRAM FORMATS

At home science-experiments or building activities

Physical movement or exercise activities

Outdoor activities

not interested

Programs where children can participate independently

Open-ended play activities

Demonstrations for children to observe and ask questions

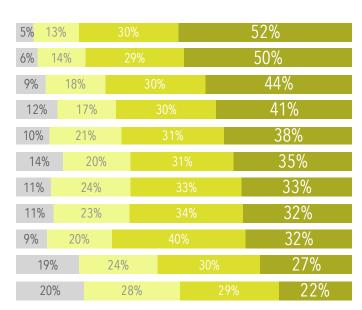
Structured play activities

Programs where you and your child engage together

One-off programs

Read alouds/virtual story time

Recurring programs that encourage repeat attendance



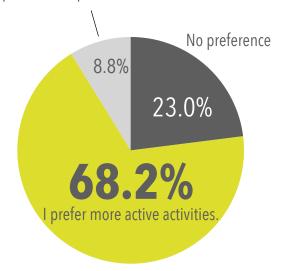
n = 909-1221

Interest in active vs. passive activities

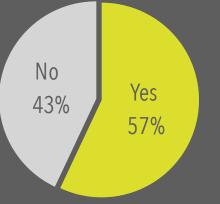
n = 1229

Respondents preferred virtual programs that promoted active physical or cognitive engagement and hands-on learning. Parents wanted virtual programs that embraced the immersive, exploratory, playful, and free-choice experiences that their children enjoyed in the physical museum setting.

I prefer more passive activities



Would you be willing to pay for virtual programming provided by the museum?





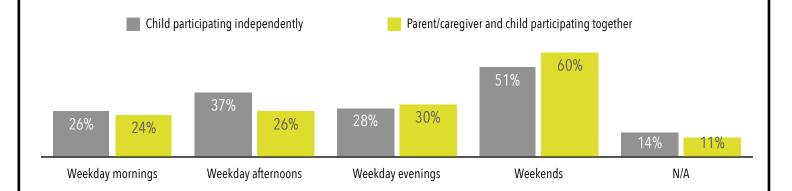
Willingness to Pay

n=716

Of those participants who expressed at least some interest in virtual programming, 57% said they would be willing to pay. With increased interest, however, willingness to pay went up only slightly: 63% of those who said they were "very interested" in virtual programming said they would be willing to pay for it. This study did not collect income data from participants, but it is likely that many participants are members of their local children's museums, as member mailing lists were the basis for most recruitment efforts.

Timing Preferences

When would you and/or your child be likely to participate in virtual museum programming? $_{n=1223}$



Parents indicated a strong preference for weekend programs, whether they anticipated participating together with their child or having the child participate alone. Only about a quarter of parents indicated they would be likely to participate with their child on weekday mornings or afternoons. Slightly higher percentages of parents could see their children participating alone on weekdays, with more indicating that the afternoons are preferable.

APPROPRIATE LENGTH OF TIME FOR VIRTUAL MUSEUM PROGRAMMING

30 minutes

The majority of parents reported that **30 minutes** was the appropriate length of time for virtual museum programming geared toward children. (n=1188)

