REPORT

REOPENING HANDS-ON MUSEUMS
Introduction

Without a doubt, the global outbreak of the COVID-19 pandemic and the measures to contain it seriously impact the museum sector. Despite the quick reaction of many governments and museum associations, there is a striking absence of distinct strategies and acknowledgment for interactive and children-centred museums and the specific needs of family audiences. To better understand current challenges and opportunities for these hybrid organisations of early learning facilities and heritage institutions, Hands On! International Association of Children in Museums aims to document and analyse the impact on children-focused museum work and collect reopening strategies for safe hands-on environments. By sharing first-hand experiences and most recent data, we hope to help ensure the endurance of play-based culture interpretation and learning.

Even though interactive and pedagogy-led interpretation approaches are considered as state-of-the art for contemporary museum work, the benefits and importance of play-based learning for all target groups is currently widely neglected by most national and international reopening recommendations and health guidelines for museums. However, best practice examples from all over the world show that ‘hands-on’ museum experiences can be made pandemic-proof.

As advocates for children, and testing grounds for innovative learning practices, children-centred museums are quick to react to the immediate needs of their visitors and communities. This asset becomes evident in the countless initiatives launched by them to help tackle the COVID-19 outbreak and its consequences during the past months. From sewing masks, to helping educate children about the pandemic, creating free digital home schooling and entertainment resources, combating loneliness, and collecting objects and stories to preserve children’s pandemic experiences, these organizations are dedicated to create a positive social impact.

The findings of this report and survey will be included into the outcomes of our ongoing EU-co-funded 21st Century Children project, which highlights the potential of museums as pioneers for 21st Century education.
This report is based on a survey, a call for inputs and first-hand experiences provided by our members collected between May & July 2020. We have received 32 full survey responses and 25 email and online meeting inputs. The report is focused on providing data on operations and programming in relation to reopening and short to mid-term strategies of interactive museum work. For insights on the economic situation of the museum sector we recommend consulting the detailed reports listed in the further reading section of this document.

Hands On! would like to thank all contributing organisations and individuals for their valuable input and helping to capture the learnings of this crisis.
## Content

Summary of main findings........................................................................................................ 1  
Results of Online Survey......................................................................................................... 3  
I. GENERAL ................................................................................................................................ 3  
II. HYGIENE & SAFETY GUIDELINES .................................................................................... 7  
   Entrance and exit procedures.............................................................................................. 7  
   Staff safety............................................................................................................................ 10  
   Exhibitions/exhibits.............................................................................................................. 11  
   Workshops/tours & special programmes ............................................................................. 14  
   Café, shops and seating areas............................................................................................. 15  
III. CONTENT ADAPTIONS: REFERRING TO THE PANDEMIC .............................................. 16  
IV. POST-PANDEMIC STRATEGIES .......................................................................................... 18  
Reopening experiences ........................................................................................................... 19  
   Lessons learned general ...................................................................................................... 21  
   Lessons learned workshops & summer programmes......................................................... 22  
   Best practice ideas .............................................................................................................. 23  
Further reading & resources.................................................................................................... 25  
Disclaimer .................................................................................................................................. 27
Summary of main findings

- **3 out of 4 responding hands-on museums** have **reopened** to some extend between June and September 2020.

- Children-centred museums tend to be tightly connected to their local communities. This reduces the threat of severely suffering from the global decrease of tourism, which is the case for the vast majority of adult-focused museums.

- In contrary to adult-focused museums with low amount of interactive elements, hands-on museums report
  
  *A high degree of capacity utilization and complex challenges* when it comes to **staff protection**, little visitors cannot reliably social distance.

- **Low-risk interactivity is possible.** With the help new strategies and safety protocols, hands-on museums are capable of significantly reducing the risk of infection for visitors and staff. Our data collection shows that most interactive museums and science centres exceed government regulations and standards for schools and stores.

- **Timeslots** are by far the **most popular solution** to minimize the risk of super spreaders and direct visitor streams.

- For the successful implementation of a safe hands-on environment for children and families, the **entire operational framework has to encourage natural social distancing** and compliance with hygiene rules.

---

Online content and lockdown offers have strengthened the role of children-centred museums as experts and laboratories for play-based education. For many this has led to more awareness to their proficiency and competence, highlighting the fact that formal education can directly benefit from the theoretical and practical resources provided by museums.

The independent legal structure of children-centred organisations causes them to be more likely to make a strong investment into reshaping their online strategy and reviewing possibilities of paid online content, than organisations whose legal entity is closely tied to a public body.

According to NEMO’s report on the impact of the COVID-19 situation on European museums, only a few museums (15%) are considering looking for alternative funding sources to make up their lost income. Whereas, almost 50% of our survey participants and email feedbacks from hands-on museums mention to plan on focusing to diversify their funding sources on a long-term perspective.

Additional staff training and a clear assessment of their new/changes roles is key to avoid frustration and ‘do not touch’ and finger-wagging communication opposing the natural mission of children-centred museums as places of individual exploration and playful hands-on learning.

Museums, which do not exclusively serve children, tend to fully close-off children’s areas and interactive exhibits and cancel interactive programmes. Whereas in our survey only 38% of all hands-on museums indicated the necessity to close-off individual exhibits.

In a long-term perspective, the development of business and financing models which rely less on entrance fees and public funding, as well as income from a single sponsor, is mentioned as a key priority by the majority of survey participants.

Many organisations expressed that additionally to the consequences of the pandemic, the black-lives-matter-movement and general uproar about structural racism impact their strategic planning on multiple levels.
• The introduction of time-slots and major reduction of visitors require new indicators to measure success and relevance of an interactive museum, as visitor numbers do not provide reliable data anymore.

Results of Online Survey

We have received 32 full survey responses and 25 additional email inputs. If not indicated differently the diagrams represent the responses collected through the online survey. The open-ended inputs are added to the corresponding descriptive text for each question as additional responses, remarks, and first-hand experiences.

I. GENERAL

The survey was disseminated through the following channels: newsletter, member mailing list, facebook, twitter and partner networks. Unfortunately, we could not generate any survey inputs from Africa, South America and Australia. However, we received some informal responses on the current situation in North Africa, West Africa and Australia, which are added to this report.

Responding Organisations: Geographic Data
The vast majority of responding organisations is located in Europe. Most responses were received from Germany (6) and the Netherlands (5). The survey was answered by organisations from 17 different countries, and the open ended inputs reached us from 8 additional countries, leading to a total of feedbacks from 25 countries.

66% of all responses were submitted by children-centred museums.

Responding Organisations: Type

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children-centred Museum*</td>
<td>6</td>
</tr>
<tr>
<td>Museum</td>
<td>6</td>
</tr>
<tr>
<td>Science Centre</td>
<td>2</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
</tr>
</tbody>
</table>

*under this terminology we combined the following survey responses: children’s museum, children museum, children’s gallery, children’s science centre, children-focused museum, children’s discovery centre and youth museum. The main purpose of this question is to distinguish between organisations entirely focused on children and families and organisations, also targeting other visitor groups.

Reopening dates per month

- May: 4
- June: 10
- July: 2
- August: 1
- September: 2
- Undecided: 6
All organisations summarized under ‘undecided’ have specified that their reopening date will most certainly be after September 2020. Five of them find it likely to only reopen in 2021.

The reopening dates of course highly depend on national legislation and regulations. In general it is striking that the more interactive and children-focused a museums or science centre is, the more it is likely to reopen later than the majority of museums in the country. This is certainly linked to the lack of clear guidance for the management of interactives and children.

For most hand-on museums, reopening does not equal returning to pre-pandemic operations and adding standard hygiene-measures, such as masks, disinfectant and social distancing signs. In order to offer a low-risk interactive and playful museum experience for families, operations have to be adapted and changed dramatically. In contrary to adult-focused museums with a low rate of touchable exhibits and an audience that is self-dependent and capable of individually applying hygiene and safety measures, children are not able to do so, especially while exploring.

The vast majority of survey responders and submitters of individual feedbacks have indicated that they will not be able to offer access to all exhibitions and spaces when reopening. Many also plan to reopen gradually to test out their reopening plans on a smaller scale.
In general, the whole sector reports a higher online activity during lockdowns than in pre-pandemic times. Investing into online content paid off: those organisations which increased their online activity, recorded a significant rise of website hits and views on other digital channels used to disseminate content.

The nature of the content provided significantly shifted from virus and lockdown-related information during the first weeks, to DIY/home activities and other none-virus-related content.

Distinct digital content was offered for parents, children, and teachers. By specifically reaching out to parents and teachers, children-centred museums highlight their roles as experts of play-based (cultural) education.

Responses show that most responding organisations offer additional DIY tutorials and experiments, whereas digitalising tours and exhibits was only pursued by a very small percentage of organisations.
Almost half of all survey participants and the majority of the additional inputs state that they took part in national and regional initiatives targeting children and families. From contributing DIY’s, to support charity initiatives in multiple ways and assisting local governments to hand out free laptops to school children, these organisations utilized their close relationship to their visitors and their expertise to support the communities during this challenging times.

II. HYGIENE & SAFETY GUIDELINES
Implementing adequate hygiene and safety measures is the key-challenge of safely reopening hands-on museums and other venues with interactive exhibits.

As official guidelines for museums often do not include clear concepts for children-centred spaces, interactive museums have drawn strategies and best practice experiences from schools, kindergartens, stores and gyms to create suitable hygiene concepts.

Entrance and exit procedures
Obviously, requirements vary from organisation to organisation in connection with the general outline of their facilities and national legal standards.

Hand sanitizing is not listed in the diagram below, as we already consider it a standard procedure when entering any public building during this pandemic. All responses mentioned hand sanitizing as crucial part of their reopening entrance and exit routines.

<table>
<thead>
<tr>
<th>Entrance &amp; Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>One way systems</td>
</tr>
<tr>
<td>Contact tracing</td>
</tr>
<tr>
<td>Health checks</td>
</tr>
<tr>
<td>Ticket check at front door</td>
</tr>
<tr>
<td>Reduced ticket contingents</td>
</tr>
<tr>
<td>Timeslots</td>
</tr>
<tr>
<td>Online payment</td>
</tr>
<tr>
<td>Online pre-booking</td>
</tr>
</tbody>
</table>

![Diagram showing entrance and exit procedures](image)
Booking:

All responses provided by organisations, which already reopened or are about to, state that they have drastically reduced their visitor contingents. The vast majority of organisations have installed some kind of pre-booking or pre-reservation system, allowing them to plan and limit the number of simultaneous visitors. Most organisations assign timeslots to reduce the number of potential contact persons. Additionally, some responses state that they also predetermine check-in timeslots for each family group to avoid crowds in lobbies and locker rooms. Only 25% of all participating organisations allow tickets to be purchased on-site, without any pre-ordering.

Door management routines:

Many responses mention that they have installed dedicated staff to manage the incoming visitor flow and ensure visitors are aware of the new hygiene and safety protocols. Almost half of the survey participants have relocated ticket checks from the welcome desk to the front door, to be able to better regulate incoming visitors.

Another commonly mentioned door management strategy is to install social distance queuing and waiting systems outdoors to avoid indoor crowds. Reducing the necessity to touch doors or door opening buttons is also a priority for many organisations. Some just leave their entrance doors open or have dedicated staff to open the doors for visitors, others installed automatic doors or door release buzzers operated by front-desk staff.

Locker Rooms & toilets

Many organisations report to have temporarily revised their house rules regarding their luggage storage policy. In particular guarded cloak rooms, or lockers and similar services are suspended for hygienic reasons. Visitors are asked to bring is little personal items as possible to the venue, including toys, backpacks and additional clothing. Some ask visitors to bring baby carriers instead of strollers and require visitors to use shoe-covers in order to minimize floor contamination.
Nevertheless all organisations signalled determination to keep these new entrance regulations as flexible as possible in order to be able to consider and respect individual needs of children and families.

Depending on the building structure, responding organisations have introduced the following additional facility management measures for their toilets:

- Higher cleaning intervals
- Max. number of people allowed into the rest room facility at the same time
- Closing-off every second toilet & basin
- Additional disinfectant dispensers
- All children are to be accompanied by an adult to ensure disinfecting protocols are followed.
- Automatic soap and towel dispensers/hand dryers
- Additional pictograms and information panels with handwashing and disinfecting protocols.

Contact tracing:

Since July museums in some German counties are obliged to record name, address, phone number and email address of each visitor before entering, to be able to contact them in case of a cluster. As this survey was closed before its implementation, it is likely that more survey participants have started practising some form of contact tracing in the meantime.

Health checks:

Measures range from self-assessment forms to compulsory temperature checks for visitors. Some organisations also have installed health checks for staff, usually including temperature checks and assessment forms. Due to the fact that health-related data is classified as very sensitive data in many countries (EU: GDPR) the legal framework for health checks and the processing of all related data, this measure requires particular diligence and legal expertise.
**Staff safety**

To get a broader understanding of different safety protocols, the survey collected measures for staff safety in open-ended questions without giving specific suggestions. For this reason, the ‘n.a.’ segments in the diagram below are quite high for some safety mechanisms.

To complement the increased safety for staff member archived by the adapted entrance and exit procedures, the most responding organisations have implemented masks or face shields as compulsory protective gear for frontline staff members. Plexiglass shields are installed behind counter tops and information desks as physical barriers. Some organisations also have installed plexiglass panels in the exhibition spaces to provide protected spaces for educational programmes and mini shows. Among back office staff, masks or face shields are only used in 19% of the responding organisations. However, 75% of all responses state that they have implemented remote working or partly remote working for back office staff wherever possible. Most organisations did not provide any information whether they have installed consistent teams to lower the risk of super spreaders in case of a team member getting infected.
Exhibitions /Exhibits
To provide a low-risk hands-on experience, interactive museums and science centres have had to adapt their visiting protocols and house rules. 69% of all responding museums state that they have introduced mandatory face covering (mouth and nose masks, or face shields) for visitors.

Of those organisations which implemented mandatory face covering for visitors, 27% stated that these measure only applies to adult visitors. Whereas almost two thirds of all ‘yes’ responses require face covering for children. Nevertheless, babies, toddlers and special needs visitors are usually exempted. Furthermore, some reported face covering is only mandatory in certain areas, limiting the measure to the entrance and lobby or smaller exhibition spaces, where social distancing cannot be reliably practiced.
Many organisations report to have introduced one-way guiding systems and set routes to help spread visitors out evenly in the exhibition areas.

The most common mentioned strategies for save interactives are:

- Guided experiences: staff coordinates and regulates interactions
- Individual kits for each visitor: gloves, touch pens, DIY materials, head-phone covers and similar tools
- Timed rotation between exhibits/exhibition areas (using acoustic signals)
- Staff disinfecting exhibits after each use
- Staff disinfecting exhibits in certain intervals
- Disinfectant is placed next to each exhibit and visitors are asked to disinfect before and after each use.

\* excluding babies, toddlers and visitors with special conditions. The starting age for compulsory mask wearing usually is determined by national legislation/recommendations and ranges between the ages of 3-10.
When it comes to closing-off or removing exhibits, 31% of all survey participants declare the need to close-off certain exhibits as a precaution. Whereas 28% of organisations state to have found realizable, low-risk solutions for all of their exhibits. Modification strategies for exhibits include, swapping manual start buttons for automated starting mechanisms, replacing high risk surfaces and materials with easy-to-clean alternatives, and providing individual objects for each visitor/family group instead of shared equipment.

The role of on-site staff is crucial for the successful implementation and maintenance of low risk, yet highly playful, visitor experiences. Many organisations report to have added a short introduction, carefully explaining the new hygiene measures at the beginning of each timeslot, where education staff playfully breaks down to most important visitor rules for children and accompanying adults.
Workshops/Tours & special programmes

The answers displayed in the diagram below do not include online-only offers, as this segment exclusively explores on-site programmes of reopened organisations.

About half of all responding organisations offer summer programmes this season, 25% cancelled this kind of offers. Only two organisations offer on-site school programmes for the rest of the school year 2019/2020, for which they created entirely new concepts. The vast majority cancelled all school programmes until further notice.

According to our survey, events are the most likely special programmes to get cancelled, followed by school programmes and birthday parties. Workshops and guided tours tend to be either modified or remodelled to better meet the requirements of the pandemic. Some responses state that they currently only open for pre-booked workshops and programmes, while their exhibitions continue to stay closed, until the situation has improved.
The settings and concepts of gastronomic infrastructures within museum/science centre premises are highly diverse, and so are the reopening approaches. In general, more than one quarter of all responding organisations decided to keep food services temporarily closed when starting to welcome back visitors. Others only offer self-service and/or a smaller selection of food.

Overall, it is noticeable that food services are not referred to as top priority services in connection with reopening. This certainly is related to the general change of operations towards time-slots, leading to a major reduction of the average visiting time per household. Only one organisation stated that it is currently possible to spend the whole day at their venue.

In contrast to food-related settings, all organisations operating gift shops will reopen them at their earliest convenience.
III. CONTENT ADAPTIONS: REFERRING TO THE PANDEMIC

The core of content creation in children-centred museum work is to reflect and respond to visitors’ needs. We asked children-centred museum professionals about their short and midterm plans on adapting content of exhibits and programs to somehow reflect the current situation. The data below illustrate how many survey participants are planning on offering pandemic-related content per content segment.

![Chart showing content segment preferences]

Workshops, tours and programmes are clearly the content segment of choice, when it comes to picking up contemporary topics. Given the flexibility and shorter preparatory phases in comparison with the other content areas, it is a convenient and budget-friendly way to quickly address new developments.

Obviously, every museum’s setting and resources are different, and the question whether and how to adequately reflect the current situation in content can only be answered individually.

Nevertheless, the questions raised in this individual decision-making process are similar for most organisations:
What do the children already know? How can we offer a different approach?

How can high-quality content be provided without extensive research and preparation time?

How can these short-notice changes be in-cooperated into the long-term content plan, which is already set for years in advance.

Funding/Budget

How can we create relevant content without the audience’s input and participation?

How can we ensure to not double existing offers of schools and to not force content upon children and families they actually wanted to escape by going to the museum in the first place?

Possible Approaches:

- Co-creation, providing room to process and address current issues: Collecting and showcasing children’s experiences of lockdown and other pandemic-related changes to their daily life.
- Pivoting existing offers: adding a reference to the current situation
- Playful processing: acknowledging that everyday life is not as it was pre-pandemic, and the impact of the restrictions children face(d); Offering opportunities of free play, which children also use as means for processing real-life experiences.
- Find ways to intuitively guide visitors towards new rules and safety measures. Address, that there are new rules, while still making clear it is a safe space, where children can explore without having to worry about doing things wrong. Implement a playful and interactive introduction to the new hygiene measures.
- Needs assessment: Which offers are already out there and which gaps still need to be filled? (schools, parents, children, local community)
- Introduce dynamic mechanisms into long-time planning, Allowing organisations to quickly react on recent topics, without overthrowing long-term content plans.
- Adapting context, not exhibits: Many existing exhibits can be used to address current issues. Add another dimension to them by seeing them under the light of a new topic. This can be introduced by staff, themed tours/programmes, an overarching scavenger hunt/challenge, additional props (e.g.: adding face masks to supermarket setting), etc.
IV. POST-PANDEMIC STRATEGIES

Areas in which survey participants are planning to implement new long-term strategy in response to the experiences of the past months.

Many organisations expressed that additionally to the consequences of the pandemic, the black-lives-matter-movement and general uproar about structural racism will impact their future strategic development on multiple levels.

In terms of content and thematic-focus, hygiene, medical issues, but also interpreting scientific information and the liability of sources (tackling misinformation), are given a higher priority for future projects by organisations.

Almost one quarter of all responding organisations plan to put a stronger focus on teacher trainings and strengthen their roles as competence centres for children’s education and innovative learning. This rethinking process of their relationships with schools and formal education as a whole also includes introducing new services and offers, especially connected to online learning and off-site activities to complement on-site visits.

The majority of survey participants also clearly expect a lasting impact on exhibition design.
Like in other sectors, online offers and digital channels have received a clear boost and the learnings from the last months will impact online strategies on the long-term. Linking online and on-site offers is named as a new strategic key-priority by almost 20% of all survey participants.

According to these report’s findings, pandemic-induced strategic shifts are most common in the area of staff management, namely establishing remote working infrastructures and more flexible working hours.

Reopening experiences

Due to the highly dynamic nature of the pandemic, some circumstances have already changed since the survey feeding this report was conducted. In this section, we would like to refer to some of the latest developments, which might not be reflected in the survey responses.

- In general, in many countries the framework for hands-on museum work is clearer, as regulations have been eased or specified over the summer.
- Organisations based in Europe tend to report that their initial fear of visitors challenging and questioning safety measures is not really an issue, as visitors are very cooperative. However, some museums in UK and US experience a rise of unpleasant visitor interactions in connection with their new protocols.
- Since July, museums in some German regions are obliged to record name, address, phone number and email address of each visitor before entering, to be able to contact them in case of a cluster. Without entrance is denied.
- Many have postponed the development of new exhibitions to 2021 or even further, several organisations also prolong the duration of their current exhibitions to make up closing times and the lower visitor frequency on the long run. Additionally, many international travelling exhibitions also have been cancelled for both, financial and logistic reasons (unpredictable boarder closings)
- The majority of hands-on museums has already reopened to some extend or will do so within the next weeks. However, there are regional differences.
• European museums do not report a high number of staff lay-offs, as most countries have implemented some kind of state-subsidised short-time work model. The situation for staff is of course much dramatic on other continents, in particular North and South America and Africa. The long-term effects on working contracts and staff contingents are yet unknown.

• Summer childcare & all-day workshops presented a huge dilemma for many organisations. On one hand, the changing pandemic-related safety and hygiene regulations made it difficult to come up with a safe, yet child-friendly concept, on the other hand, many working parents rely on this service, especially as short-notice alternatives are very limited. Some organisations cancelled all summer programmes very early into the pandemic in order to give parents more time to find alternative solutions. Others fully remodelled their summer concepts, to meet the latest regulations.

• The last months have highly impacted the formerly pretty solid relationship with schools. Many organisations report that pre-pandemic school groups made up the majority of their annual visitors. Given the uncertainties of the school year 2020/2021, field trips are not likely a top priority in formal education. Exploring new ways of cooperation and means to serve teachers and students nonetheless is therefore on the agenda of all organisations involved in children-centred museum work.

• Underrepresented groups (minority groups, special needs, etc.) are currently even harder to reach, as they often visit through schools or specially tailored projects. With preregistration & new procedures, a much lower percentage of field trips and guided after school activities, barriers for these groups have significantly risen. Filling their mission as inclusive spaces and maintaining their relationships with underrepresented visitor groups, is a great contemporary challenge.

• Time-slots & social distancing vs. free play. Reconciling safety and child-led exploration is a challenge. However, children-centred museums have come up with creative and individual solutions proofing hands-on experiences are possible in almost any setting.

• Many organisations mention set-backs when it comes to sustainability. Waste reduction, recycling and sustainable materials have become important missions over the past years. Having to reintroduce single-use items for hygiene purposes and the increase of pandemic-related waste (masks, gloves, wipes, etc.) impedes past sustainability efforts and achievements. On a mid- to long-term perspective the use of easy-to clean plastic surfaces for exhibits and interactive materials is expected to rise and wood, recycled materials and fabrics to complement the haptic experience might decrease.
We also can track a huge policy shift regarding group bookings during the past weeks. Immediately after reopening many organisations reported to not accept bookings for larger groups. After some weeks, many now do, as established groups are easier to manage than individual visitors. Additionally a homogenous, pre-existing group is safer, as they know each other well and are in touch after the visit, which makes a potential infection much easier to manage.

**Lessons learned general**

This is a none-exhaustive collection of individual feedback by various children-centred museum and science centre organisations world-wide.

- During the first weeks of reopening, the average age of visitors in museums not exclusively serving children was significantly lower than pre-lockdown.
- To help reduce crowding, it is easier if guided tours do not run at the same time as spaces are open for individual visitors.
- One of the few hands-on museums reopening without compulsory pre-booking, reports that despite this open setting, far less visits than their current capacities would allow.
- Very re-known classical museums and children-focused museums report a good average visitor capacity utilisation, whereas smaller museums, with some additional interactive and children-focused offers in their portfolio, experience rather low visitor numbers.
- In general visitors of all ages are very understanding and accept new procedures/restrictions, and frontline staff does not report a rise of conflict situations. However, whenever measures are not really enforced by staff through regular kind reminders or procedures, people tend to show ‘health-measures fatigue’, like not using disinfectant or washing hands properly.
- For the most part, visitor feedback regarding mid-pandemic operations is very positive, visitors are so happy to be back. Families are eager for entertainment and play opportunities outside of their homes. In comparison with the reopening feedback of adult-focused museums, the audience is still quite diverse and
contingents are pretty full. Nevertheless organisations’ abilities to reach niche audience as significantly decreased.

- Contingents are of course much smaller to allow proper social distancing, but the percentage of visitor capacity utilization is about the same as pre-pandemic for most hands-on museums. This might have to do with the fact that children-focused museums & highly interactive spaces tend to be mostly visited by local audiences rather than tourists. For many adult-centred museums this is vice-versa and their main visitor groups are tourists, which highly impacts their current visitor numbers.
- Timed visits and shorter visit durations lead to in-depth interaction and more active participation of adults. When they spent the whole day in the museum, parents often sat at the side and let children experience exhibitions on their own. Now, children-centred museums observe adults to more actively take part in the programmes and engage with exhibits themselves.
- The current drastic reduction of the visitor-staff ratio also holds the potential of new guided formats, and individual mentoring and new roles for front-line staff.
- As national regulations are subject to frequent changes, we recommend regular assessment and consultancy of lawyers to ensure the implemented hygiene and safety measures meet and exceed national regulations.

**Lessons learned workshops & summer programmes**

- Parents were very grateful for the availability of full-day summer programmes
- Most workshops and summer programmes are moved outdoors whenever possible and are conducted in small, consistent groups.
- More directed individual activities than group works.
- Relocating venues, breaks, etc. have to be well structured and scheduled in advance, otherwise social distancing and separating used materials from fresh ones becomes a challenge. The approach of playfully introducing structure is reported to work best for staff & children (sitting/standing in hoops, holding onto spaced out knots on a rope to maintain distancing, washing hands to a song, etc.).
- When once introduced to the hygiene protocol, children are very cooperative and even remind each other about necessary measures without staff having to intervene.
For smaller children social distancing while engaged in activities is the biggest challenge. Predetermined activity settings, which require natural distancing, are ideal to help them stay apart.

Wearing masks when necessary is widely accepted by parents and children. Nevertheless, smaller children cannot fully follow the mask protocols, when it comes to not touching the outside of the mask or chewing on it. This has to be considered when using masks as hygiene measurement.

Best practice ideas

- Storytelling has a great potential to compensate interactive materials, which had to be removed from exhibitions for hygienic reasons, such as costumes. Instead of putting on a costume to ‘change’ into a role, staff can guide children by a little story (e.g.: guided imaginary/ imaginary journey - magically transforming children into this role, or guiding them towards feeling how the new role feels and how this changes their bodies).
- Acoustic signals when a timeslot finishes, but also a few minutes before, so visitors have the opportunity to visit the exhibits they really want to see.
- Traffic light systems for exhibits. When an exhibit is freshly cleaned the light is green, after a visitor played with it, it is turned to red until staff has disinfected it.
- Door management & time slots not just for visits, but also for arrival.
- Implementing Individual solutions for different exhibition spaces. (e.g.: closing-off smaller toddler areas for one family group, some spaces can only be entered as part of a tour, etc.)
- Personal interactives: Suitcase/packs with hands-on materials, tinkering kits, but also to feel textures.
- Bring Your Own: Staff connects with visitors via their mobile phones, AR interactions, or asking visitors to bring certain objects or materials (also available for purchase or rent in case they some do not have them with them.
- Reopening: slow start, gradually opening exhibitions and spaces one after another to test and see what works with smaller groups of people.
- Adjusted opening hours as there are no school classes.
- Indications on each room/area how many people/families are allowed in
- Refunctioning closed exhibits to touchless interactives: (e.g.: Boston children’s museum’s repurposed climber as giant I spy game)
• 2 separate waiting queues: For ticket holders and last-minute. Last-minute visitors only get called in, if there are still tickets available. Only as many people are allowed to enter the building, as there are left-over tickets available. (e.g.: Signs or digital screen outside, so people know whether it is worth queuing) Doors remain closed outside of timeslot arrival times. Visitors are asked to make contact via phone or email and not just drop by.

• Using ozone- machines or fogging for regular and low-staff effort deep-cleaning

• Create a welcome space, where visitors are carefully introduced to the new hygiene and safety protocols and can learn why they are important. Making hand-washing and social distancing entertaining helps children and adults alike to remember the new rules throughout their visit.

• Online: Interactive formats can also be successfully transferred online. Examples:
  MUBA, Sladovna, Da'DeCe - Unprepared hearts
  https://www.youtube.com/watch?v=NnoTrTuixYI&feature=emb_title
  Rijksmuseum Amsterdam- Online Key challenge
  https://www.rijksmuseum.nl/en/from-home/online-key-challenge
  Junges Museum Frankfurt- Digital exhibition
  http://mmg.historisches-museum-frankfurt.de/#/page/2741
Further reading & resources

- Hands On!: Coronavirus-related tips and resources
  https://www.hands-on-international.net/coronavirus-resources-and-tipps-for-museums/

- Hands On!: Statement of support
  https://www.hands-on-international.net/statement-of-support-during-covid-19/


- NEMO: map reopening status European museums
  https://www.google.com/maps/d/viewer?mid=17-4zW7VeebnCetu54fNo-wukxY6KcrG&ll=45.74318754729228%2C7.20451200000003&z=4

- ACM: Collection of virtual programming by children’s museums
  https://findachildrensmuseum.org/at-home/

- Digital museum initiatives during the Coronavirus Pandemic
  https://digitalmuseums.at/index.html

- Kids in Museums: Collection of best practice lock-down museum activities
  https://kidsinmuseums.org.uk/2020/06/10-museum-activities-for-families-from-across-the-world/

- Boston children’s museum reopening plan
- Kids in Museums: Getting SEND (Special Educations Needs & Disabilities) families back in museums

- ICOM: Covid-19 resources

- ICOM report: Museums, museum professionals and COVID-19
Disclaimer

While submissions and results are not guaranteed to represent the current circumstances of all hands-on museums in their respective localities, this report nonetheless offers a view into the consequences and challenges faced by interactive and children-centred museums as well as their efforts to overcome them and serve their communities.

Even though this report is not an official output of our ongoing Creative Europe project, the findings of this report and survey will be included into the outputs of our ongoing EU-co-funded 21st Century Children project, to better reflect the current situation of the sector.

The European Commission's support for this report does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.