



Home
of 21st Century
Education

Part 1
Best
Practices

Susanne Gesser

Museums in the 21st Century
Pioneers of Education

hands on!

21st Century Children

International Association
of Children in Museums



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Introduction

We at *Hands On! International Association of Children in Museums* have made it part of our mission to define quality standards for museums, cultural and exhibition venues, as well as science centers. These are designed to serve as guidelines for innovative, future-oriented, inclusive cultural work with and for children.

Our association, together with the European Museum Academy (EMA), has already awarded an annual prize for excellent museum work since 2011, the Children in Museums Award (CMA). Each year, a candidate is selected and featured by a jury of experts. The finalists include only exceptional and particularly innovative, creative exhibitions, programs or museum offerings with and for children in museums. The focus on children and young people plays a substantial role in the selection. We seek especially those institutions that actively support children in their cultural learning and involve them in cultural work, as well as fostering their imagination and fantasy. A high-quality learning environment and learning experience are crucial.

To assist museums and related institutions in the process of transforming themselves into forward-looking cultural and learning venues for children and families, *Hands On! International* has developed over a two-year period the *Home of 21st Century Education* quality certificate. To this end, eight quality standards were established as criteria, which are described and presented in more detail in this publication (starting on p. 16). This is **Part 1** of three parts; visions and basic considerations that led us to develop the certificate are presented in **Part 2: Analyses**. Achieving the *Home of 21st Century Education* quality label is a two-step process and is described here (www.21stcenturychildren.eu) and in the publication **Museums as pioneers of 21st century education. Part 3: Practical Guide Book**.

There you will find further information about commitment, certification and the “How to”. In addition to the main body of this first section, which includes a more detailed description of eight quality characteristics and best practice examples, is an introductory text by Sarai Lenzberger, long-time *Hands On!* contributor. It outlines the not-so-recent history of children’s museums, beginning with the first ones established in the USA, then examines the European field in more detail. It also goes into more detail about the peculiarities and specialties of European children’s museums (p. 6).

Claudia Haas and Petra Zwacka, both founders of children’s museums in Vienna and Berlin and former jury members of the Children in Museums Award, reflect on the criteria that are decisive for the CMA award. In their text contribution, they also point out the changes and challenges facing children’s museums on the threshold of the 21st century, and discuss the future viability of this specialized institution. (S. 10)

Here we would like to thank the sponsor of the *Home of 21st Century Education* project. Without the financial contribution of the **European Union (Creative Europe Program)** the project would have remained perhaps only a brilliant idea, and could not have helped museums for children to become innovative future-oriented places of culture.

Susanne Gesser

Vice president of Hands On! International Association of Children in Museums

Jury member of Children in Museums Award

Head of Junges Museum Frankfurt

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A brief look into history of Children's Museums

By Sarai Lenzberger

At the end of the 19th century, the Brooklyn Children's Museum pioneered independent children's museums: For the first time, a museum developed its own educational concepts specifically for children. A few years later, the Boston Children's Museum opened as the second of its kind and during the 1960s ushered in a new museum pedagogy, banishing showcases and introducing the so-called "hands-on approach". The world's first hands-on exhibition "What's inside?" was created by Michael Spock and marked a new area of children-oriented museum work, helping children's museums to mature and free themselves from the standards, functions and working methods of classical museums and develop an independent identity.

As a result, the concept gained popularity and support across the entire country. Today, there are over 250 children's museums in the United States, and the trend is rising. In the wake of this movement, the Association of Children's Museums, the network organization for children's museums in the USA, also emerged in the 1960s. For European children's museums, ACM is particularly important because of its work for the recognition of children's museums as a museum genre.

European children's museums

In contrast to the US, European children's museums are rather young. Moreover, given a different tradition of cultural policy, additional concepts of children's museums were developed. Like the first European children's museum, the *Juniormuseum* of the Ethnological Museum in Berlin, (which opened in 1970 and doesn't exist anymore) these were institutions of a symbiotic character: in-house children's museums within traditional museums. The *Junges Museum Frankfurt* (established 1971, opened 1972) and the *Tropenmuseum Junior* of the Tropenmuseum Amsterdam (established 1975), are probably the best known representatives and oldest of this type of children's museums still operating. The first stand-alone children's museum, *le musée en herbe* – was an art museum for children in Paris opened in 1975. However, most European children's museums were established in the 1980s and even 1990s. It is important here to emphasize the difference between the children's programs of traditional institutions, in-house children's museums and independent children's museums. It is of course gratifying that the children's museums in Europe triggered a boom of innovative education at traditional museums as well, and their work is also of great importance for the field. As a side note: This caused us to change our association's name to the Association of Children in Museums.

In-house children's museums are able to combine collection-based, action-oriented and audience-focused programs and exhibitions. They work with educational collections, presenting exhibitions and offering a rich learning program for intergenerational groups as families. Independent children's museums by contrast, are free to develop their own programs and pedagogic work based on individual topics. They additionally have the opportunity of tackling whichever topic they believe particularly relevant for children in their region and community. Hence, these children's museums operate visitor-focused, which from a European point of view was a novelty in the museum sector. Children's museums recognized for the first time children and families as a distinct target group, and continue to develop special programs and types of education adapted to the needs of children. There are countless types of children's museums: from independent houses, children's museums connected to traditional museums (in-house children's museums), to mobile children's museums and temporary initiatives such as pop-up museums and similar temporary projects.

So what is special about children's museums?

Although varied, there are a few distinct characteristics of European children's museums, which naturally can also be found in some institutions outside of Europe. Of course this list might not be exhaustive.

Diversity

European children's museums are very diverse, leading to a highly heterogeneous landscape. This is closely related to the cultural, social and political diversity of European countries. Each country has its very particular identity, encompassing its history, cultural heritage and language, which leads to the many different approaches in the field. Most children's museums developed out of national and regional initiatives, and due to language barriers – and more importantly to cultural and political obstacles – there is no such thing as one core concept that applies to all European countries. Confronted with such a diverse audience and topics often rooted in very regional issues, most concepts for children's museums are not simply transferable without the need of major adjustments to the living reality of local children.

Content/Topics

Visitors are given the opportunity to try out and develop new methods, to critically address and deal with current issues. Children's museums develop their content based on the everyday life of their target group. This makes it possible to quickly react to current topics and limit themselves to content relevant to the target group. By creating a familiar environment, children's museums reduce inhibitions and increase accessibility. Current children's museums focus on broader topics such as ethnology, art, history, science, etc. and follow the approach of offering multiple perspectives on one issue, by asking critical questions and demanding reflection on one's own behavior.

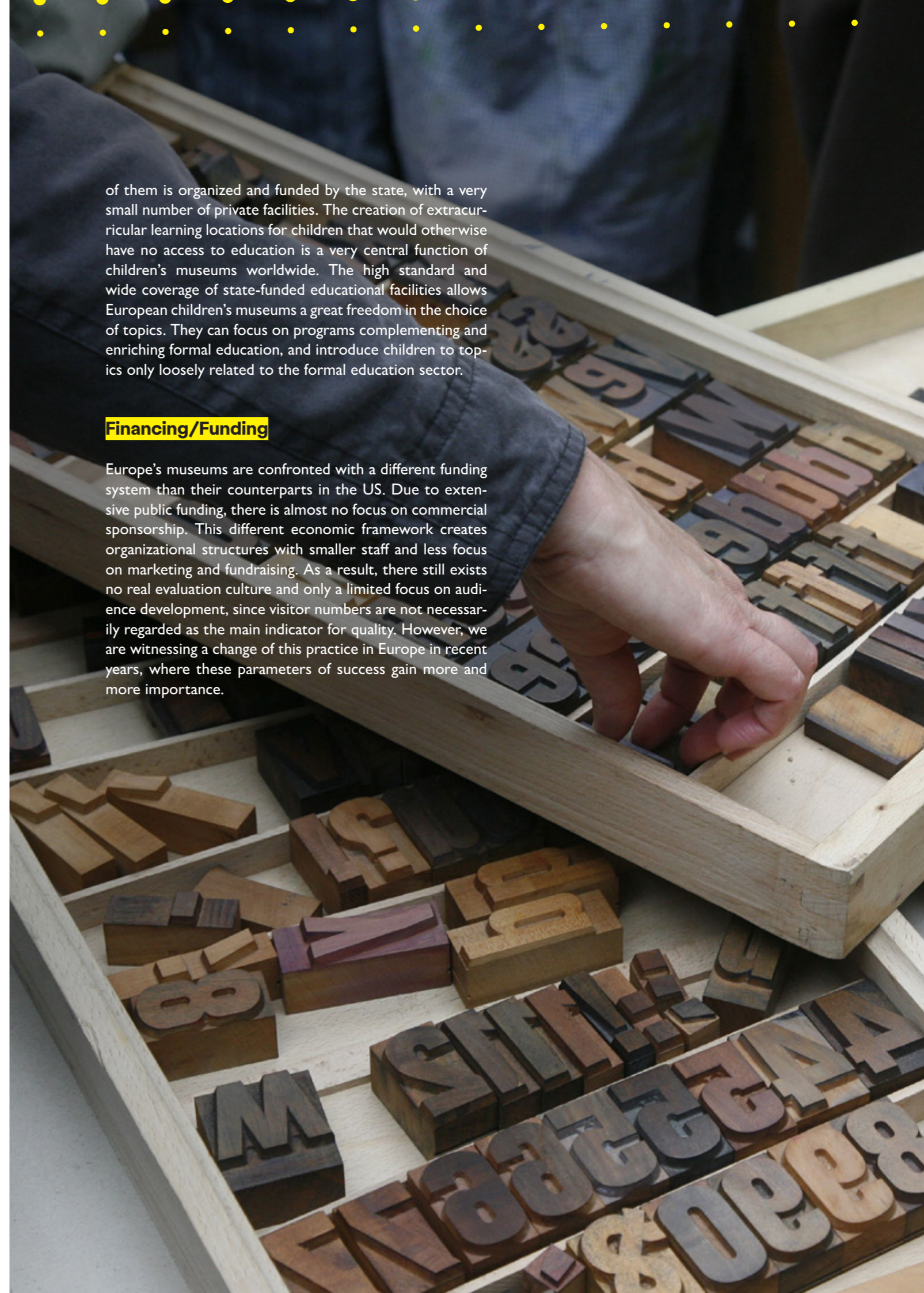
Educational aims

Even though Europe's educational systems (including pre-school facilities) are as diverse as Europe's countries, they have one thing in common: the vast majority

of them is organized and funded by the state, with a very small number of private facilities. The creation of extracurricular learning locations for children that would otherwise have no access to education is a very central function of children's museums worldwide. The high standard and wide coverage of state-funded educational facilities allows European children's museums a great freedom in the choice of topics. They can focus on programs complementing and enriching formal education, and introduce children to topics only loosely related to the formal education sector.

Financing/Funding

Europe's museums are confronted with a different funding system than their counterparts in the US. Due to extensive public funding, there is almost no focus on commercial sponsorship. This different economic framework creates organizational structures with smaller staff and less focus on marketing and fundraising. As a result, there still exists no real evaluation culture and only a limited focus on audience development, since visitor numbers are not necessarily regarded as the main indicator for quality. However, we are witnessing a change of this practice in Europe in recent years, where these parameters of success gain more and more importance.



Can children's museums survive the 21st century?

By Petra Zwaka and Claudia Haas

For almost three quarters of a century, children's museums were the only museum type that exclusively welcomed and served children and their families. By reflecting and adapting to the constant changes in society and their surrounding communities, as well as embracing the newest pedagogical methods, they were highly successful institutions throughout the 20th century. However, this unique position significantly changed at the beginning of the 21st century. They were confronted with a cultural landscape in which children became a much sought after audience by all museums.

Today, it is a familiar scene to observe children sitting with their drawing pads in front of famous paintings or using interactive installations together with their parents in science museums; school groups have access to the newest equipment in the labs of natural history museums. Creative encounter spaces, children's trails through exhibitions or even interdisciplinary children's museums are now common state of the art. Once a distinctive and unique feature in the concept of children's museums, the hands-on principle now belongs to the general repertoire of museums, regardless of its mandate or provenance. Since classical museums have started targeting a young audience, children's museums have lost their exclusivity. This poses the question of the relevance of children's and youth museums today and in the future.



When and why has this fundamental change in museums taken place?

Children were discovered as potential audiences during the last quarter of the 20th century. Major reductions in public funding at this time pressured museums to demonstrate “healthy visitor numbers”. Audience increases were increasingly seen as indicators that museums were successful. By inviting school children in, classical museums were able to open up to new communities. This additionally helped demonstrate the museum’s relevance in communities with rapidly changing demographics.

Serving new audiences, the museums had to adapt to these new target groups by introducing action and interaction into their exhibitions, workshops, and child-friendly programs. These copied methods previously used exclusively by children’s museums.

How do children’s museums compete with this development, especially considering that other museums are better equipped financially, in terms of staffing, and can offer big-budget blockbuster exhibitions as well as more advanced facilities and better equipped workshop spaces.

What are the consequences for children’s museums?

These new developments can best be illustrated by the winners of the “Children in Museums Award”, established in 2011 to feature the best children’s museum world-wide.¹ First only called “Children’s Museum Award” it quickly adapted to the new situation in 2014 when it changed its name to “Children in Museums Award” and opened up to applicants from all museum types, reflecting the wider range of institutions for children in today’s museums.

The significant shift in the structure of competing museums in recent years needed to be taken into account.² The number of applications from children’s museums had significantly decreased while those from other museums continued to grow. Now, representatives of practically all museum types – from science museums, natural history museums, historical museums to even art museums – are in competition with traditional children’s museums.

The great diversity of museums in terms of their financial and organizational potential made it difficult for the jury to judge small, underfunded children’s museums competing with big national or regional institutions. It was necessary to define objective criteria giving small institutions with limited resources a chance to compete.

The jury agreed on the following criteria:

- Innovation
- Creating immersive learning environments
- Embracing and reacting to the Digital Revolution
- Creative ways to use collections
- Addressing contemporary issues
- Achieving social impact
- Participation

Innovation has been a hallmark of the children’s museum movement since its early days, but what was once a groundbreaking idea has become mainstream. Interactive installations as well as programs offering self-directed learning can be found nowadays in most science and natural history museums as well as historical museums. So, what are the new creative ideas implemented in museums that can be judged as being innovative?

Creativity, action and interaction, using artistic-aesthetic methods, play involving all the senses, and connecting all this with intercultural and global learning - these are a few of the key words associated with today’s innovative museums focusing on children. Most importantly, it is the museum that takes risks, leaves beaten paths and seeks to be a pioneer, changes paradigms and serves as a model to other institutions that convinces the jury to judge a museum as innovative.

Immersive learning environments aim to turn the museum visit into a personal, emotional experience. Creative environments can totally captivate children, encouraging them to employ all their senses and stimulating both curiosity and the thirst for learning. Thus, the scenography implemented in children’s exhibitions and areas should be designed to convey a message as well as a content. The importance of creating beautiful aesthetical environments has increased immensely in recent years, as applications for the award have shown. Most of the museums now employ young artists, also well-known designers, and architects to design their exhibition areas, much improving the quality of work compared to earlier times.

Bridging the analog and digital world is one of the most important challenges for children’s programs. Concepts should aim at helping children born in the digital age to learn healthy ways of using their devices and to better understand the difference between the real and digital world.

Convincing concepts in children’s museums help youths to change their role from user and consumer to creator and programmer by, for example, making animated films, podcasts, films. Digital programs in museums

should differ from those that can be played at home by young people. Preferably they should include teamwork, bridging analog and digital creation.

Creative ways to use collections has become an important criterion as more and more classical museums with large collections reach out to children and families. In recent years, radical approaches on how to engage a young audience with the museum collection have arisen. Where traditional museums provide information that visitors merely absorb, these museums have reversed the roles: young audiences here are invited to investigate and research the collections, find their own stories and interpretations.

Addressing contemporary issues through daring, demanding themes

As the youth of the early 21st century becomes more and more political, exhibition topics should be chosen to follow the interests of the young generation: ecology, climate change, pollution, migration, pandemics. Exhibitions should help these audiences to distinguish between facts and fake news, stimulate critical thinking and encourage a more global view on contemporary issues.

Achieving social impact – being meaningful for people’s lives

Best practice museums focus on how to respond to the needs of different communities. Through partnerships with community-based organizations, welcoming programs are developed that keep in mind the special needs of this potential audience.

These museums see themselves as places of social encounter, where families can spend quality time in a safe environment. They serve as meeting places for old and new citizens, enhancing cultural exchange and mutual learning, and by adding new narratives that awaken curiosity through different perspectives they can enrich children’s lives.

Participation – children as experts

Redefining the role of children in museums requires a very radical approach. Children should not simply be seen as small visitors who must be safely guided through galleries. On the contrary, they are to be understood as competent young people engaging with institutions through their ideas and creativity. Some museums have implemented advisory boards with young people, invited them to contribute, or even co-create exhibitions and try out the role of curator.

These programs are normally very demanding for the museum staff. They require a museum management to be open and ready to take risks, one which trusts in the competence of children, is patient and takes the necessary time.

Many exceptional applications over the past ten years from children’s museums, as well as from children’s areas and programs in other museums, have met these criteria.

The question arises: how can children’s museums survive in this contested museum landscape where more and more museums focus on families and children? The best chance of survival is to look toward their strengths instead of constantly searching for new paradigms.

In contrast to traditional museums, children’s museums have the opportunity to focus on and serve one specific target group. These institutions best know the needs of their community, can sense changes in society and the lives of children, and react accordingly. Children’s and youth museums have a long history of dealing with demanding themes such as death, illness, sexuality, gender and migration. No theme is too difficult for young people, when addressed in the right way. Staff must have the sensitivity to transport topics in a child-friendly form, creating a safe and inspiring environment.

The children’s museum of the 21st century must be a space for social interaction and intercultural dialogue, which gets involved in the way social issues such as exclusion, increasing poverty and a society shaped by diversity and migration are dealt with. It is not about constructing a children’s world, but about taking children and young people seriously, with the goal of helping them become tolerant, respectful citizens.

To defend their unique position museums must

- offer best quality
- expand programs to different age groups
- reach out and involve underserved communities
- strengthen their relationship with the educational system
- seek new pathways to widen their subject matter
- take risks and focus on contemporary issues
- be self-critical
- continually rethink and if necessary change methods
- reflect on their mission and redefine it if needed
- never be satisfied with their work, but constantly try to improve it.

In light of global and economic crises, future children’s museums will all need to realize their full potential in order to prove their value as essential cornerstones in the cultural and museum landscape of their respective countries. The question is: *how?* This question can only be answered through the active exchange between the people involved – locally, nationally and internationally.

¹ Award is jointly presented by Hands On! International and the European Museum Academy.

² Petra Zwaka and Claudia Haas have both served as jury members from the very beginning.



Home of 21st Century Education Museums

By Susanne Gesser

Since its founding in 1994, *Hands On! International*, an association of participating children's museums in Europe, has been lobbying for the idea and spread of children's museums as well as providing concrete support, advice and assistance to newly founded museums. Conferences are held every two years, which serve both as an exchange forum among the children's museums and offer a platform for the further education and professionalization of museum staff. Here, current topics and trends in the scene and related fields are repeatedly discussed and tested for their suitability. The *Children in Museums Award*, which was co-initiated by our association, has been awarded annually since 2011 (with one pandemic-related exception in 2020) to a museum for its excellent children-focused museum work.

The association has now developed the *Home of 21st Century Education* quality certificate. Vital and inspirational for this were the reflection on the history of children's museums, as well as the research by Claudia Haas and Petra Zwacka (see p. 10–13) presented at the 2018 CMA awards in Malta and at the 2019 *Hands On!* conference in Frankfurt. Eight quality characteristics have been identified as guidelines for a *Home of 21st Century Education*, which are described and presented in more detail below. Three best practice examples in each category illustrate these eight criteria. They are all – with one exception – institutions that have been either winners or short-list candidates for the *Children in Museums Award*. In this way, 24 of the world's best museums for children are featured here, all standing out like beacons in the diverse cultural and museum landscape, and offering guidance to other institutions on their way to becoming a *Home of 21st Century Education* themselves.

Home of 21st Century Education institutions can be, or transformed into, a wide variety of extracurricular cultural places. Children's museums exist in many forms: independent children's museums, children's museums integrated into traditional museums, mobile or temporary museums. Likewise, there are museums with their own department, exhibition rooms, programs or with a strong orientation towards families with children and young people. Science centers, as well as cultural centers and institutions, art galleries, educational centers, exhibition venues, libraries, or archives with a focus on children can also become a certified *Home of 21st Century Education* institution.

8 Quality Characteristics

- 1 Door to Culture
- 2 Learning Through Play
- 3 With All the Senses!
- 4 A Better World
- 5 Bridging the Gap
- 6 Be Heard!
- 7 Digitally Aware & Active
- 8 Constantly Changing



1. Door to Culture

An easily accessible public place of joy, beauty and imagination for everyone. It is a public haven of well-being and enjoyment, heritage, aesthetics and imagination, which serves as a gateway institution into cultural life.

Common to all *Home of 21st Century Education* institutions is that they are public places and threshold-free. They are available without access restrictions, mostly or completely barrier-free, and have regular opening hours. Ideally, these places are centrally located and easily reachable by public transport, so that children can get there safely even without adult accompaniment. Optimally, there are no entrance fees or charges, so that every child can participate regardless of family income. Special (mobile) socio-cultural programs and projects, outreach cultural work as well as community work should specifically address disadvantaged children and their families, and invite them to participate and complement the work of the institution.

The institutions are characterized by a connection to their culture and cultural heritage (both tangible and intangible), didactic programs and exhibition areas, as well as interactive hands-on stations for children and their families. Cultural learning is an essential part of a general education, enabling every individual to participate in society and access the rich treasure of historical and contemporary arts and media; to experience and appreciate diversity, and to express themselves in a differentiated way. It is important to begin and continue with arts education as early, diverse, and in as many places as possible. The *Home of 21st Century Education* institution is a very special place for cultural education because it places modern, future-oriented cultural learning at the heart of its activities. Participation, diversity, inclusion and overcoming social inequality are all part of the fundamental approach of *Home of 21st Century Education* institutions, as well as the liberal democratic principles of the European society.

The architecture of the space should take into consideration the abilities, needs and possibilities of the target group and have the child as its central focus. Children need safety and protection for their activities, which should be considered together with the structural, architectural environment. Light and visibility conditions should provide good orientation in the room and simple, understandable signage should guide visitors. The dimensions, colors and acoustics of the rooms are also important, and should radiate a positive, pleasant, inspiring and fear-free atmosphere. Since children love to conquer and shape their environment, it is helpful if they find elements in their surroundings that can be moved or modified. The architecture should additionally offer spaces for interaction, where encounters and movement are possible. It is a place where children, young people and families come into contact with culture and the cultural heritage of the region and its inhabitants, in all its forms and without prejudice. This means that people with no previous knowledge or experience are also welcome, and are even especially addressed. The focus is on the target groups: family and caregivers /children/ youths. Often such a place enables the very first encounter with culture and cultural heritage outside the family milieu and can be formative for a child's development.

The following three best practice examples represent different types of museums: the independent *Children's Museum in Graz*, the *Junges Museum* as part of the Frankfurt Historical Museum, and the *Rijksmuseum Amsterdam* with its diverse outreach program for children, schools, and families.



FRieda & freD Kindermuseum Graz, Austria

(CMA-Nominee 2012 + 2014)

Opened in 2003 in a modern, purpose-designed building set in a park, the museum serves children from ages 3–14, with annually changing exhibition topics. It follows an innovative approach by creating two exhibitions on the same demanding topic for two different age groups: three to six-years-olds, and for children ages 7–14 – and is moving forward by asking children to evaluate and develop new exhibitions. The creative programs of the children's museum include a summer school of museology for the youngest children, garden parties, and a learning laboratory for primary school children. Much effort is devoted to scientific research, in co-operation with the university and other institutes. The museum is an important cultural hub in the region and attracts children from neighboring countries.

fridaundfred.at/en



Junges Museum Frankfurt, Germany

(CMA-Nominee 2018)

The *Junges Museum Frankfurt* was opened in 1972 as a branch of Frankfurt's Historical Museum. Its aim is to confront the present-day visitor with a past situation, represented by historical artefacts. All exhibitions are created especially for a young but heterogeneous audience, combining original objects from the educational collection representing everyday culture with hands-on interactive displays. Additionally, the *Junges Museum* has created 'family trails' leading through all the permanent exhibitions of the Historical Museum, with an array of hands-on stations for families installed at, or in close proximity to original exhibits or object groups. The combination of a children's museum and a traditional city museum with family trails and children's activity stations provides an enjoyable learning experience for the whole family. The museum has succeeded in engaging children of a variety of ages within a museum conceived for a general audience.

junges-museum-frankfurt.de/en



Rijksmuseum Amsterdam, The Netherlands

The *Rijksmuseum* is the national museum of Dutch art and history. The mission of the museum is to be an open, welcoming place where visitors feel at home and experience objects, material and immaterial heritage, and stories relevant to their lives. Children and families play a central role in the museum and its educational program. It offers a wide range of activities for families and schools, both off- and online. There is a digital family game with eight mysteries to solve, four sample routes for families to follow through the museums, a free *Rijksmuseum* App as well as guided tours for students of all ages. At the education center '*Tekenschool*' the focus is on 'learning to look by doing', with workshops and courses designed for various age groups. It has three studios: a visual arts studio, a photography studio and a Golden Age theatre. This historical theater workshop, featuring Hugo de Groot or Nova Zembla titled *You & the Golden Age*, is designed for families with children.

rijksmuseum.nl/en/families-and-children



2 Learning Through Play

A home of interactive self-learning, a place to try out the unknown, be astonished and use your imagination. It is an educational laboratory and incubator of contemporary education, developing and testing innovative educational practices. It is continuously creating and improving Hands-On! Mind-On! Heart-On! experiences, offering play-based, multi-perspective and interactive learning.

Even if often doesn't appear so, when children play they are doing serious work. Play is the way they learn to express their feelings, use language and acquire social skills. Through play, children discover their environment and the world, find out how things work, what they are used for and what their purpose is. Play can take many different forms, helping children to develop, practice and learn basic skills and abilities. This is why opportunities and environments encouraging play are a cornerstone of all *Home of 21st Century Education* educational venues and exhibitions. These are imaginative experiential spaces offering a range of insights, and offering its visitors a field of experimentation and experience. But they are also places of learning, and can have an important role in imparting knowledge if they are innovative, and create play and learning situations based on current learning psychology and pedagogical research. Didactically, these worlds of experience should correspond to the intellectual abilities, tactile needs and urge to move of children in different age groups. The topics of the exhibitions should be scientifically-based, multi-perspective and elaborated with great care, meaning: they take their visitors seriously. Appreciation and respect for the child as an individual are an important basis for the design of the spaces. Every *Home of 21st Century Education* venue is also a social space, offering a variety of sensory experiences and impulses for learning. It is a space animated by children and families bringing their individual knowledge, expectations and needs into it. Learning with all the senses, social learning and cooperation are important components of the educational work; this can be supported by combining play and self-learning, for example.

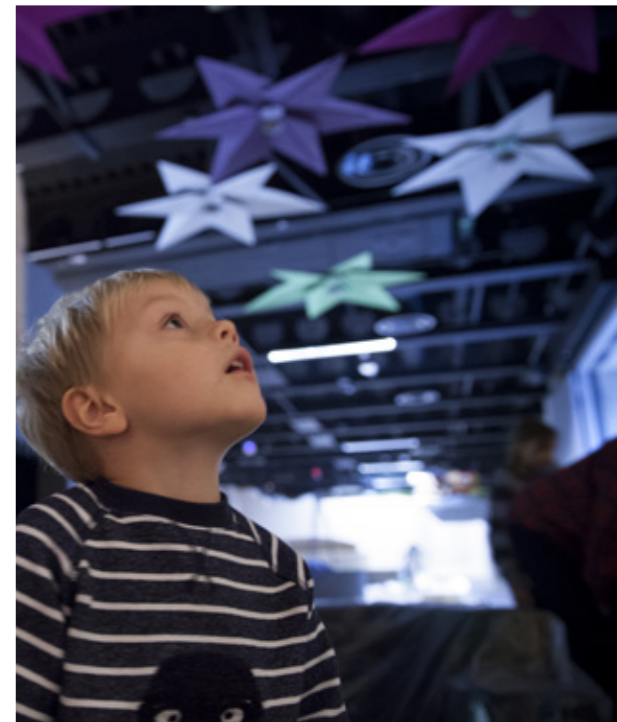
Through play it is possible to practice social interaction, get involved and learn together – even without prior knowledge or great expertise.

It is essential for the design of the learning environment that it offers its visitors opportunities to move independently, actively and freely, as well as to decide for themselves in which sequence and intensity an exhibition is used. The learning venue focuses on children and their families. It aims to make life in a complicated world with its diverse cultures understandable, but also to astonish visitors and awaken the understanding, in an age-appropriate way, that the surrounding world is not simply "there", but has been created and can therefore be changed and improved. It should also convey the socio-social context in which people live and work, today and in earlier times.

Museums and other cultural venues have the unique opportunity to employ objects and cultural heritage in illustrating technical, scientific, cultural and social development. In connection with museum objects, interactive elements and role-playing can transport children into earlier times, other cultures or situations. As active players they can inform themselves, ask questions and have fun discovering another era, culture of a habitat, or a situation in the "adult" world. Designed learning environments or staged spaces make it possible to slip into roles and experience historical everyday life or the working world through interaction. In role-playing games, a background story helps to experience past living environments. This can prepare children for life and promote social and emotional development. Through their own play and action, it is possible to initiate learning processes about history.



Each child's own background of experience is the decisive factor here, and the ease with which it can take in an environment is the starting point for new experiences. Learning about history and culture helps put children and the society in which they live, but also their own parents and grandparents, into context and develop an awareness of their own roots. These reflections and experiences, the expansion of knowledge, gain of insight and self-worth are all linked to fun, activity and the chance to do, or try out, something one has never done before. All three best practice examples place interdisciplinary and multisensory, playful experiences at the heart of their exhibitions and installations. Each finds its own way to translate their content into contemporary forms of learning.



NEMO Science Museum Amsterdam, The Netherlands

(CMA-Nominee 2016 + 2021)

The current exhibition *Humania* provides innovative and interactive ways of introducing complex topics to young learners through age-appropriate scientific, physiological and biological approaches and a combination of analogue, participatory and digital experiences. There are many stations where visitors can be actively engaged, but others which invite more private discussion and reflection. The exhibition uses a personal approach, starting from the personal stories of diverse people, to exploring one's own perceptions, opinions, beliefs and emotions. Some exhibits touch on sensitive topics (sex, death, exhibiting human remains). The *Forum* is a distinctive program where visitors can participate and share ideas in supervised dialogue on themes such as climate, nutrition and health.

nemosciencemuseum.nl/en



Museum of Technology Helsinki, Finland

(CMA-Nominee 2021)

Founded in 1969, the *Museum of Technology* is a national museum dedicated to science, technology, industry and innovations. Its mission is to increase participation and accessibility to technology and technological heritage. Through its various programs, the museum aims to enhance understanding of the technologies that shape our everyday life. The current exhibition is aimed at children between the ages of four and nine. Design principles include multidisciplinary, multi-sensory and multiple ways of interaction, drawing upon the knowledge and experience of technology children already have. Objects from the museum's and educational collection are used in showcases and hands-on exhibits, and five displays with 50 objects from daily life can be touched and studied with flashlights, magnifying glasses and measuring tape. For a science museum, the focus on objects and storytelling are new ways of engaging the interest of small children.

tekniikanmuseo.fi/in-english

Museum of World Culture Gothenburg, Sweden

(CMA-Nominee 2016)

The *Museum of World Culture* is particularly interested in all subjects that concern young people. The first permanent exhibition in the museum's history targeting children ages 0–12 and their accompanying adults was created in 2013. Titled 'Together', it is about the fantastic but challenging experience of being together: big questions of human existence are mirrored through objects from the collections, chosen in an interactive process with representatives of the target group. The exhibition aims to encourage curiosity, strengthen abilities to communicate, and share experiences. Themes include 'Understanding each other', 'Agree to disagree', 'Fit in' and 'Being without'. The museum uses a wide range of activities to evaluate its performance. Quantitative and qualitative studies on the number of visitors, age-profile, number of school lectures and visitor experience of exhibitions and other programs are carried out regularly.

varldskulturmuseet.se/en/exhibitions/together

3. With All the Senses!

It broadens children's horizons holistically through meaningful, multidisciplinary experiences, inviting children to develop their talents and skills based on the Hands-On! Mind-On! Heart-On! principles.

Holistic learning is an individual, self-determined and sustainable process where learning with hand, head and heart are connected, and in which children can learn playfully, action-oriented and with joy.

Brain and intelligence research teaches us that our brain is the central organ of thinking, but also of all control processes in humans. There is a constant exchange between the right and left hemispheres of the brain – thus thinking, experiencing and feeling are interconnected, which means our brain works holistically. By collectively challenging their thinking, feeling, experiencing and acting, we respect children in their entirety. For this reason, a wide range of sensory experiences and bodily sensations are significant for human development. Varied and personal experiences are essential, ones that stimulate all the sense organs – eyes, ears, skin, nose and tongue – because 'grasping' is a prerequisite for all understanding, and requires a concrete, real encounter between the child and its world.

Project-oriented and phenomenological learning is a fundamental approach that can only be supported, or made possible at all, through hands-on objects, interactive stations and workshop areas. There, children learn about different ways to express their ideas and feelings using a range of artistic, scientific and craft techniques. It is therefore of importance for learning processes to effectively link movement, sensory perception and cognition. An action-oriented, playful approach and the appeal to different senses are ways to involve the target group through active behavior. Self-initiative supports the 'grasping' of connections, cycles and networks.

Relating to objects, and integrating authentic, historical, artistic or cultural objects from a didactic collection for instance, ensures for a vivid, instructive process. The chance to look closely and intensively at things, touch or use them, and even examine or disassemble them into their individual parts, supports this process. Learning craft skills and acquiring abilities, as well as developing aesthetic judgment also belong to the educational content of *Home of 21st Century Education* institutions – along with, of course, the fun and the enjoyment of creating together. The productive encounter with independent, practical, experimental and guided work allows children to experience an expanding of their own abilities and skills. Workshops give them the opportunity to test, develop and broaden their own artistic-creative competence through a shared experience. This free space – for thinking, acting, discovering – is defining for the creative process. To anchor and promote holistic learning in the *Home of 21st Century Education*, it is important to consider the mental, psychological and physical diversity of children and to do justice to their individual strengths, abilities and weaknesses. To achieve this, it is essential to design learning processes in which holistic learning is understood as a constantly evolving interplay of sensory perceptions, thinking skills, movement and feelings.

The three selected best practice museums implement learning with hand, head and heart in continually new ways – very differently, but always in high quality. The immersion in other worlds and the self-determined productive encounter with the museum content is exemplary here.



Tropenmuseum Junior Amsterdam, The Netherlands

(CMA-Winner 2012 + CMA-Nominee 2021)

The *Tropenmuseum Junior* was founded in 1975 as a museum only accessible to children ages 6–13. It has since been transformed into a children's museum where families are also welcome and parent-children involvement is encouraged. Its exhibition *Sabi Suriname* is advertised as 'an unexpected discovery'. Suriname's diversity, with ancestral roots in four continents, is the result of a shared colonial past still alive in the present day. Visitors take an elevator to a fictitious Suriname depot seven floors below ground, to find the country's real collection: a hidden closet that only opens for curious children. To make difficult content understandable for the young target group, various technical approaches are used including sand animation, interactive music, rhythm floor and soundscapes. The faces of Surinamese actors are projected onto wooden statues made by descendants of enslaved people, who relate their stories and present families with a question to discuss. Trained animators with a Suriname background and personal connections to the culture exhibited offer a guided program daily.

tropenmuseum.nl/en/themes
tropenmuseum-junior



Keppel Centre for art education at National Gallery Singapore

(CMA-Winner 2018)

The *Keppel Centre* operates as part of the National Gallery Singapore, and the exhibitions there are inspired by a selection of artworks exhibited in the permanent galleries. Their vision is to nurture future generations of art lovers and critical thinkers by providing creative dynamic learning spaces and programs for children to learn about and enjoy art. Programs dedicated to families provide inter-generational experiences, while for students the development of a critical mind is central to empowering their diverse viewpoints. The involvement of local artists who are inspired by the museum collections, in collaboration with the dedicated education team, has led to the production of excellent, well-designed exhibitions for younger visitors. With its free admission and mantra 'Children first, parents second!' the *Keppel Centre* is an excellent example of an institution within an art gallery, introducing children to art at an early age while acknowledging the importance of lifelong learning.

nationalgallery.sg/gallerykids/keppelcentre



Nordiska museet Stockholm, Sweden

(CMA-Nominee 2021)

The museum aims to help children and pupils of all backgrounds and origins feel they share, and have a stake in, the cultural heritage that shaped Sweden and the Nordic region. By offering knowledge and experiences from the past, it provides them the tools to understand the present and shape their future. Through identifying with stories about children in previous centuries, they gain perspectives on their own existence. The exhibition is designed as an adventure, inspired by escape rooms, and based entirely on historic events and true stories from the museum archives. Stepping inside the exhibition, children become co-creators in the narrative: Their mission is to rescue the memories of the children they encounter in the narrative. More than 200 objects relating to children's lives over 150 years are woven into a simple dramaturgy, in a setting inspired by magical worlds. The rooms, props and objects are brought to life through interactive audiovisual media. At the end of the exhibition, visitors can submit their own memories to a Memory Machine, where they are stored in the museum's digital archive.

nordiskamuseet.se/planera-besok/barn-och-familj



4. A Better World

Sees children as an equal part of society, imagining and changing the world into a better place. It fosters education for humanity by empowering its visitors to build healthy relationships between individuals, community and society, encouraging children to become co-creators and agents of change in society.

Every child has an individual personality, shaped by its environment. The education and development of children is thus also influenced by differing conditions. The first ten to twelve years of life are the most learning-intensive and developmentally rich years in a human life.

Children learn most sustainably when they are actively involved in the learning process and are allowed to act, think and try things out for themselves. Education is a social process and does not begin with institutionalized learning in daycare centers and schools; interaction and exchanges with adults and other children play an essential role. All participants in this process should be involved on an equal footing, or “at eye level”. This leads to the development of a stable society in which everyone feels connected and safe with each other, and their needs are met.

In a place of *Home of 21st Century Education*, whether in the exhibition or the educational work, adult caregivers have the duty to respect a child’s autonomy and behave sensitively towards them. In groups of children with different abilities, this diversity should be understood as an opportunity. In exhibitions or learning environments it makes sense to plan activities that can be solved in small groups: the community experience, the social moments and interaction with family or classmates, for example in role-playing, are enormously important and attractive for children. Not simply participation, but co-creation should shape these experiences.

Through play, children develop at an early age imagination, abstraction skills, self-confidence, different perspectives, foresight, frustration tolerance, cooperation skills, creativity and solidarity. It is important to consid-

er that children already bring with them skills based on characteristics such as temperament and talents, but also on their personality and individuality.

Similarly, environmental factors play an important role in children’s education and development. These include the cultural and social practices, norms and values of the society into which they are born. Education should be understood holistically, and reflected in a child’s development. The holistic understanding of education has various dimensions: basic skills and value attitudes (cultural dimension) are combined with the acquisition of fundamental content knowledge.

Cultural education should be part of a comprehensive development. It promotes skills and abilities in various basic aesthetic competences, and also has a positive influence on a child’s perception and creative abilities. A general aesthetic education forms the basis for self-reflection, self-worth and participation. Education for a sustainable development focuses on strengthening creative abilities, with the goals of practicing decision-making skills, perceiving and demanding opportunities for co-design, and assuming responsibility. It includes respectful interaction with one another, in which mistakes are also allowed. It is necessary to strengthen confidence in one’s own ability to act, build resilience in order to deal with life’s uncertainties and increasing complexities, and to retain a social and cultural openness.

Helping to shape the environment and the world they live in, educating children to become responsible members of society and actively participate in it, as well as dealing with democratic values – these are at the heart of the activities and programs of the following three award-winning best practice examples.





Ker ImagiNation
Dakar, Senegal

(CMA-Winner 2019)

Ker ImagiNation is a children's learning and educational center, the first of its kind dedicated to creative learning in Senegal. Its vision is of an Africa powerfully led by young people, contributing to the economic and social well-being of their society. *Ker ImagiNation's* work supports children's empowerment through the inspiration of its children's programs. The multimedia exhibition entitled '*Imaginer Dakar: La Ville par ses enfants citoyens*' is the result of a collaboration with children from Yoff, the traditional fishing village where *Ker ImagiNation* is based. 30 children benefitted from the 15 project-based workshops on topics such as multimedia, city planning and architecture, which led to critical conversations involving their city, local neighborhoods and the efficiency of its public services. Issues raised included the absence of public playing areas, trash and waste problems, and safety. Through photos, video and interviews, the children documented these with family members and neighbors.

Sorry, no website available at the moment!

Dutch Open Air Museum
Arnhem, The Netherlands

(CMA-Winner 2021)

"The Restart" program, designed for school children ages 11–15, focuses on the universal experiences of immigrants coming to a new country. It begins in the classroom by conveying basic knowledge about the reasons for migration. The children then expand this acquired knowledge in the museum, with experiences learned through game playing. Taking on the role of immigrants coming to a new country, they explore the open-air museum, guided by tablet computers, and face challenging new tasks like learning a new language, tasting unknown food or adapting to new cultures. They are encouraged in the game to interact with museum staff, visitors and each other. The museum curated the program with deliberation and great care: consulting teachers and migrants, they decided to make 'rejection' an integral part of the game. Only by experiencing frustration and disappointment for themselves can students gain insight into the situations and difficulties faced by migrants. A careful and thorough evaluation after the game concludes the program.

www.openluchtmuseum.nl/restart?taal=en

People's History Museum
Manchester, United Kingdom

(CMA-Nominee 2021)

This is the national museum of democracy in Britain, telling the story of its past, present and future. It provides opportunities for people to learn about, be inspired by and get involved in ideas worth fighting for, including equality, social justice and a fair world for all. These ideas are brought to life through collections, exhibitions, events and learning programs. As the 'go to' place for democratic engagement, the museum aims to make sure people care about the world they live in, get involved in their communities, engage in the democratic process and use their right to vote. The interactive galleries allow all ages and abilities to explore through digital, tactile and playful ways. In parts of the building a set of self-led activities called *Playful Protest* can be found, which explore creative acts of civil disobedience, taking inspiration from real protests. A *Doodle Den* lets visitors explore the collections by scribbling and sketching in a relaxed environment.

phm.org.uk



5. Bridging the Gap

It serves as a meeting place for all ages, bridging the gap between generations and fostering intergenerational dialogue and learning.

Interaction between children and adults is important for a child's social development. A child's encounters with other children and adults give it the opportunity to develop and test skills in dealing with other people. Practicing group behavior, learning the ability to deal with conflicts, as well as expressing and understanding feelings helps children to play a part and experience themselves in community with others. In the longer term, positive encounters with others strengthen the self-confidence of children. Families are inherently intergenerational groups: adults of different ages who are related to, or in friendship with each other; children of different ages, from infants to teenagers. In everyday life however, our society generally offers few points of contact between the generations, unless these relationships are actively sought and maintained.

The grandparent generation often has skills and abilities that are no longer taught in school. Knowledge passed on from generation to generation, such as changes in language, living environment and everyday life can be learned through an exchange with older generations. Senior citizens can convey living history through their stories and interaction with children. Their handicraft or daily life skills are part of our culture – contemporary witness projects clearly show the importance and sustainability of “oral history”.

A Home of 21st Century Education institution can bridge the generational gap and harness it for the benefit of children and youth through targeted programs and opportunities. When it comes to the question: “What was it like when you were little?” children are very inquisitive, take a keen interest and listen closely. Organized ‘Senior days’ allow the older generation and children to engage in conversation. There may also be older staff members in the educational team. Mutual understanding, patience and composure in dealing with each other are valuable prerequisites. In addition to doing things together, a lot of time should be set aside for intensive conversations. Positive encounters with the older generation can be important relationship experiences for children and young people, as well as for the senior citizens: the seniors feel needed, and the children and young people realize they are being listened to and taken seriously. Lost or no longer existing contacts, especially to older relatives, can be broadened by new forms of getting together – in order to let as many as possible enjoy positive intergenerational experiences.

In addition to the direct intergenerational exchange, these three selected examples also offer encounters with earlier generations, which is only possible through the museum programs.



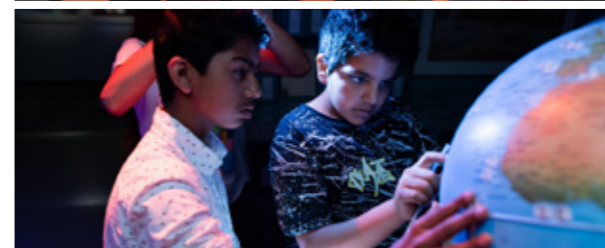


Den Gamle By Aarhus, Denmark

(CMA-Nominee 2019)

The mission of the *Den Gamle By* (The Old Town) historical open-air museum is to reach as many different people as possible, and is committed to making it a place children want to visit. The free entrance for all under-18 includes play days, handicraft and cooking activities, and joining in family role-playing. There are school visits, holiday camps and programs for children with special needs; children ages 12-15 act as fruit sellers in period costumes and sell products to visitors. Assisted by trained staff, they gain the courage to interact and talk with strangers. Events for children with costumes and role-playing are experiences enabling them to really feel what a child's life might have been like 100 or 150 years ago, and provide opportunities afterwards for discussing current-day issues. Creating an historical atmosphere is central, including sensual experiences such as being in a room without electricity, feeling woolen fabric on bare skin, and the draught from doors and windows of pre-modern living. Children ages 9-15 can also become child actors, taking a course in drama with a basic knowledge of various historic periods, before acting with trained adult actors and visitors to bring history alive here.

dengambleby.dk/en/den-gamble-by



National Archive The Hague, The Netherlands

(CMA-Nominee 2019)

In the exhibition 'Who Am I, Who Were You?' children experience how the time, place and circumstances they were born into influence the opportunities and choices they have – or are denied. Themes include: 'Right and wrong in the Second World War', 'Leaving house and home', 'Trade and slavery' and 'Fight for your rights'. Armed with a tablet computer and a flashlight, small groups follow a designated route through the exhibition. Each group adopts the identity of a historical figure and discovers the choices and restrictions faced by their character through an 'archive cave' of letters, photographs and documents. The exhibition is a stimulating learning environment where children can examine original documents and reflect on their own values and life choices – comparing them with people living in different times and their perspectives. It is a good example of making archives more accessible and interesting to children, young people and families.

nationaalarchief.nl/en/explore/who-am-i-who-were-you

Nationalmuseum Stockholm, Sweden

(CMA-Nominee 2021)

The museum's vision is 'A museum for all', with the aim of opening up the world of art to more visitors and promoting encounters between people and generations. In a new permanent space for children, the museum offers programs from pre-school up to high school age. The exhibition *Villa Curiosa* is a home behind the doors of an old cupboard, where visitors can make their own discoveries. In a multisensory setting, original art from the collection mixes with scenic props. A conscious decision was made to exclude written texts and digital screens, in order to promote a unique sensory experience. It is a very creative and beautifully designed space for families, who must co-operate if they wish to see everything. Cultural heritage must be continually re-interpreted. The museum seeks to enable this through a non-judgmental approach, which can be experienced in the tours and educational vision the museum has chosen: for more dialogue and storytelling, and by inspiring rather than lecturing.

nationalmuseum.se/en/utst%C3%A4llningar/villa-curiosa

6. Be Heard!

A place to interact and engage – where every voice can be heard. It is a responsive, audience-focused institution, where interactivity is at the heart of every visitor's experience. Social and cultural diversity is reflected in all its "P"s: in its people, program, products, promotion, place, partners, processes and prices.

The exhibitions and activities of *Home of 21st Century Education* institutions are audience-oriented and relate to the living environment and everyday reality of children. They seek points of contact in the lives of children and their horizon of experience. It is important to identify and interactively realize topics relevant and relatable to today's children.

Exhibitions suitable for children should appeal to their enormous curiosity, thirst for discovery and knowledge, as well as the great interest children bring to a wide variety of topics. Children often carry also very specialized knowledge or experiences with them, and want to deepen and expand on these. In view of such a large range of topics, the selection process and exhibition conception should attach great importance to plurality and multi-dimensionality. For example, the parallels and contradictions of historical or technical developments, cultural processes and actions, should be made visible and emphasized by setting up different stations. Juxtaposing different perspectives, opinions or interpretations helps children to understand that their perception represents only one aspect, and that the same process can be perceived completely differently from another point of view. Multiple perspectives, diversity, inclusion – especially in social, cultural-historical and socio-political topics – are an absolute must.

Content should be prepared according to age, and presented in a logical context in order to spark children's prior knowledge. Activating children's own experiences is crucial for absorbing, connecting and converting existing knowledge into new insights. Learning psychology calls this cumulative learning, an aspect of self-directed learning. Children and young people should also learn at an early age to form opi-

nions, exchange views, defend their positions and to tolerate those of others. Pluralism of opinion and the processes associated with it form the basis of liberal democracies. Acquiring creative competence is central to enabling people – whether younger or older – to actively participate in the process of social change for the future and to help effectively shape it. Alongside this, a participatory approach is of major importance. When a *Home of 21st Century Education* institution designs and develops its programs and presentations together with children and young people, it is offering them the opportunity to help shape their cultural venue. This can be achieved for example by establishing a Children Advisory board. Lower-threshold possibilities include inviting participants or visitors to create their own contributions within an exhibition, with the opportunity to expand it if necessary. In this way, children and young people are no longer perceived as mere consumers, but as creators who have special knowledge and can express and contribute ideas, desires and opinions. In accordance with the UN Convention on the Rights of the Child, Article 31, the children are thus given the opportunity to participate culturally, in particular to have a say in the content of their *Home of 21st Century Education* institution and to integrate their own perspective. Through collaboration, children can broaden their personal and social skills and are sensitized to community and cultural engagement.

The following three best practice examples demonstrate in an excellent manner how an exhibition and outreach program can be conceived, designed, and executed in an inclusive, multi-voiced, and participatory way.





Wereldmuseum
Rotterdam, The Netherlands

(CMA-Nominee 2021)

Superstreet is an inclusive exhibition about the cultural diversity of Rotterdam, aimed at children ages 6–12 and their families. The theme is ‘living together’, and the concept is based on the idea of an urban neighborhood environment where children discover and interact with different neighbors, stories and objects. The museum believes active participation engenders a sense of ownership and empowerment. Children discover diversity through the eyes of eight characters, each with their personal stories, built around themes ranging from war, migration and loss, to celebrations, dance and entrepreneurship. The exhibition relies on a variety of storytelling techniques and approaches, with objects from the collections, digital films, projections and animations and tactile, participatory play. Children and families truly experience meaningful activities on *Superstreet*.

wereldmuseum.nl/en/whats-on-wereldmuseum/exhibitions/superstreet

The National Museum of Science and Technology
Stockholm, Sweden

(CMA-Winner 2017)

Deviating from solely technical exhibitions, the museum has begun researching and conveying the how and why of society’s commitment to technology: how it can be changed through thought, and answers questions of how ideas originate in our brain. The exhibition *MegaMind* was created to be totally accessible, and with the involvement of our target group: children over three, with the focus on the 8–12 year age group. It includes innovative approaches that seek to spark creativity and curiosity for neuroscience and the brain’s extraordinary abilities, from a contemporary perspective. The program *FUNKIS* involves tasks of varying degrees of difficulty, presented through text, speech, Braille and sign language - with students sharing their results in various designed ways. This model demonstrates that there has to be a permanent process of development and change, reflecting present-day questions, challenges and visitor needs.

tekniskamuseet.se/en/discover/exhibitions/megamind

National Gallery
Dublin, Ireland

(CMA-Nominee 2021)

Children are crucial to the *National Gallery’s* vision of providing an experience that inspires interest in, and an appreciation of art. Target groups range widely, from early years, pre-school, primary and secondary schools, to families, community groups and children with additional and specific needs. There are Sensory Baby Workshops and Sunday morning drop-in intergenerational workshops which are artist-led, flexible, support skill-sharing and include all materials. The *Apollo Project* is aimed at teens and young people, focusing on education, creativity and well-being. Teens have been involved from the outset in the brand identity and design, as well as the conception and evaluation of the programs. A recent project includes working with *LauraLynn*, Ireland’s Children’s Hospice, in collaboration with The Abbey Theatre. There is also outreach work with Focus Ireland, a charity working with those who are homeless or living in emergency accommodation. Children are informed of events through social media, family e-letters and on-site engagement.

nationalgallery.ie/what-we-do/education-department



7 Digitally Aware & Active

It is digitally aware and active, embracing digital technology and helping children to navigate between reality and virtual worlds.

21st century children are growing up in a changing digital society. The digital transformation process permeates all areas of our lives, bringing new forms of societal organization, access to and the democratization of knowledge, new competencies and forms of communication. Concepts of community, opinion-forming processes and information or evaluation take on new meaning, because they are networked and simultaneously negotiated globally in a constant and ongoing discourse. Providing children with access to information, and in particular to the media, is enshrined in the UN Convention on the Rights of the Child, Articles 13 and 17. These articles also stipulate that child-friendly digital opportunities of social and cultural benefit to children should be created. An essential part of this is to empower children as subjects in their use of digital tools, which play a special role in the context of information and the expression of opinions.

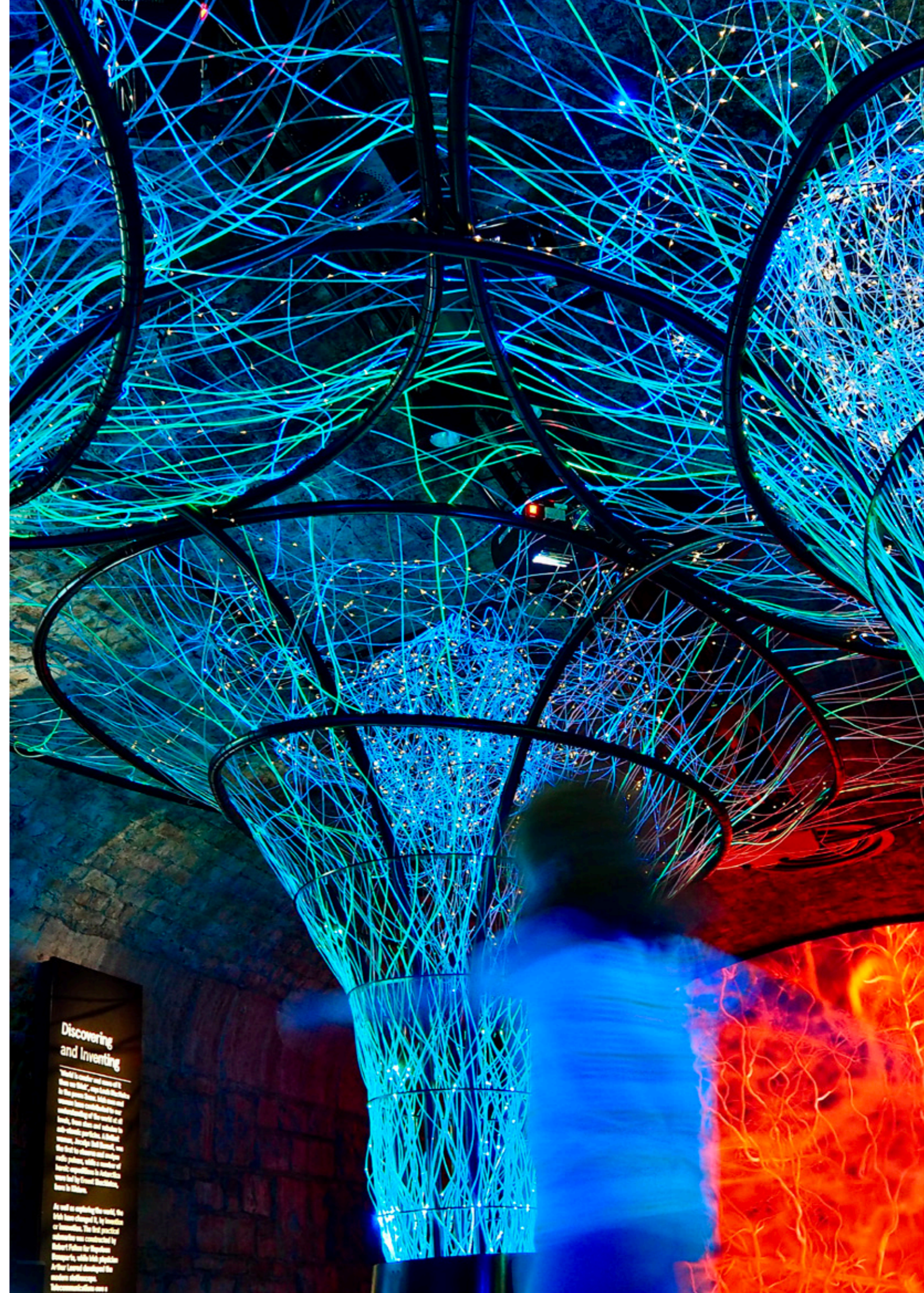
The digital transformation also presents cultural institutions and children's museums with completely new challenges and opportunities: digital learning, new methods of teaching, and shaping social change are important new fields of activity. Digital learning enables participation and educational opportunities for all. It is self-determined, because children help shape the learning processes and can contribute their own strengths. With the help of digital tools, content can be conveyed in a lifelike, playful, and tangible way, offering the opportunity to stimulate discussion of topics regardless of time and place, and thus reach a broad target group. However, they can also be designed especially for a particular target group, or specific group of people. Created toward individual needs, they can provide inclusive and barrier-free access for groups that cannot

participate in analog formats, or can do so only with difficulty. Digital tools thus build bridges and create access and cultural participation for all.

Digital worlds open up spaces of opportunity, access to community and knowledge. *Home of 21st Century Education* institutions see themselves as active players shaping the digital transformation, employing digital technologies and forms of digital learning in an age- and target group-appropriate framework. Digital tools are not used for their own sake or for the sake of technology, but serve as contemporary formats for cultural learning.

In doing so, institutions act from a special position of responsibility and care: it is not only their task to enable children to participate in digital worlds, but also to equip and protect them with the necessary skills to do so. Children should be empowered to be agents of digital change themselves and to move purposefully in a digital society. Critical reflection on content and opinions, media literacy, and digital literacy are central aspects of a sustainable and holistic encounter with digital tools. Digitally active institutions provide children with age-appropriate and secure information and offer orientation in the digital world. They teach children how to inform themselves, critically reflect on information, express their opinions and share them with others. They help children find themselves in the digital society and thus increase their self-confidence in social interaction.

Employing the latest trends and state-of-the-art digital technology, these three best practice museums focus on learning about the digital transformation and enhancing the digital literacy of their visitors.





EPIC the Irish Emigration Museum Dublin, Ireland

(CMA-Nominee 2017 + 2021)

The museum concentrates on an innovative approach to the use of digital technology as a learning tool. 20 themed galleries fall under the headings of Migration, Motivation, Influence and Celebration, with over 300 individual stories. The aim of the museum is to stimulate the interest of young people and invite them to be actively involved by using the different digital stations. Content is contained within numerous screens and audio-visual pods, where visitors actively swipe and tap to unlock and access information, as well as experiencing immersive reactions triggered by body movements. The museum feels that children and teenagers today are rightly called 'digital natives', and utilizes technology as an inspiring learning tool, catering for all learning levels and styles. Feedback computers at the end of the exhibition give visitors an opportunity to answer set questions about their museum experience and write their own comments.
epicchq.com

M9Museum Venezia Mestre, Italy

(CMA-Nominee 2019)

This is an interactive multimedia space dedicated entirely to children and their families, located inside a new M9 urban redevelopment district. *M-Children* presents digital exhibits inside a large space divided into 10 rooms featuring a variety of topics, including colors, 20th-century art, and 'sounds from around us'. The environment is designed according to Montessori guidelines - all exhibits combine games and storytelling, with a good balance between the use of digital media and hands-on activities, and are designed to stimulate imagination and curiosity in young visitors. There are workshop programs for children ages 4-12, as well as for school groups and families. The museum is also developing an early learning program for infants from 0-3 years and their families, integrating exhibits with suitable contents. Class activities are divided into three main groups: Educational Laboratory, Activity Laboratory ('Thinkatorium') and special activities dedicated to robotics and coding.
www.m9museum.it

Eye Film Museum Amsterdam, The Netherlands

(CMA-Nominee 2018)

This museum embraces and explores new technologies, as well as new forms of filmmaking and presentation. It seeks innovative ways of presenting the richness of cinema specifically for children and youth, because this audience is particularly open to new forms of presentation. Great efforts have been made to include several interactive tools explaining the functionality of older devices. *EYE Explore* is an example of how it connects with the past, present and future of cinema in a playful and attractive way. There is also the *VR Film Set* experience, which can be watched in the museum or on a smartphone using the free *EYE VR-app*, transporting children to a film set in order to learn about current filmmaking practices. Film education is one of *Eye's* key focuses, stimulating the passion for and knowledge of film through learning to understand and use the medium.
www.eyefilm.nl/en



8. Constantly Changing

Connects to global themes, but acts locally and is continuously adapting. It is a dynamic and evolving organisation, adapting and responding to the changing needs of local communities in connection with current global and local developments.

A *Home of 21st Century Education* is an open and learning institution. It learns from children and listens to their needs and expectations. It takes into account their abilities and competence, and empowers, supports and encourages them to become active members of society. Children are also given the opportunity to actively participate in culture and help shape the cultural venue, which is designed for children and is entirely geared to that target group.

Qualified, committed and motivated staff are the basis for a *Home of 21st Century Education* institution. People from all backgrounds and of all ages work together here on equal footing, in a collegial and respectful manner, regardless of their different lifestyles. Together they form a team with diverse professional competencies that complement each other and allow for different perspectives. They are continually developing the operation of their cultural space for children thanks to engaged creativity, the introduction of new topics and observation of the audience in its interaction – testing new forms and approaches in learning, and as such becoming experts for innovative education. They work in an interdisciplinary way and face the challenges of a constantly changing society.

The *Home of 21st Century Education* institution and its staff are in an ongoing development process, shaped and driven by their activities and the participation of the local community. Their goal is to be and remain an institution for the community and children with their families. A further goal is to reflect the diversity of society: in its staff, exhibition activities, program,

and the collection. People not otherwise called upon or heard from are offered a platform here; marginalized groups are given a voice. Groups that usually have no contact with each other are encouraged to leave their social bubble, meet and exchange.

The *Home of 21st Century Education* institution is to be understood as a forum. It further assumes its responsibility as a center of education, discourse, culture and science, and works in the service of the public for a sustainable society. It advocates for a democratic, socially just and sustainable world. The institution is also particularly open to learning from children and young people themselves, who bring a great amount of (digital) competence with them. They see children as experts on the digital world and its mechanisms, constantly grappling with new technologies and the digital transformation. In their orientation and tools, the organizations remain agile and responsive to change. *Home of 21st Century Education* institutions are also embedded in the local and regional environment, well-connected and thus remain relevant for learning and practicing participation and co-creation. They impact the city, the region, and support collaborative and democratic community learning.

These best practice examples are museums undergoing self-critical transformation, responding to the needs of their visitors, the surrounding urban communities, and the environment. They have achieved high relevance for children and families while being a responsible institution.





MUSEON
The Hague, The Netherlands

(CMA-Nominee 2021)

The museum is a dynamic, evolving institution that is constantly adapting and responding to the changing needs of local and global communities. Its permanent exhibition was renewed in 2016, and is now based on the 17 Sustainable Development Goals of the United Nations. It demonstrates a clear approach to ethical, social and sustainable issues, with a mission to share in finding solutions for a viable planet. The combination of the ethnographical, historical, physics and natural history collections, its educational approach, interactivity, scenography, exhibition design and the use of innovative techniques is well-balanced. The active involvement of diverse audiences and communities, both local and worldwide, are exemplary, as well as its activities in the field of social inclusion and decolonizing of collections.

museon.nl/en



Museum of Communication
Bern, Switzerland

(CMA-Nominee 2018)

With its exhibitions and activities, this museum is making a statement about the social and cultural effects of communication and its technologies. It is especially geared to children and school groups, and seeks to arouse their enthusiasm for the communication all around us by asking questions, telling stories and involving visitors in dialogue. The exhibition is based on the themes: Experience, Entertainment and Education. Integrated into the exhibition are specially designed stations for children from 4–8 years, where they can make discoveries on their own. Trained communicators are always present as hosts, bringing a personal dialogue into the room, while meeting the varying needs of visitors independent of their age. The daily interaction between visitors and communicators means that content can be amended to meet changing demands. This 'dynamic curation' means that changes can be implemented on a weekly basis.

mfk.ch/en

MUZEIKO
Children's science centre
Sofia, Bulgaria

(CMA-Nominee 2016)

This is the first children's museum in Bulgaria and the largest in south-eastern Europe and the Balkans. The development and design process involved children, parents and teachers, as well as more than 80 scientists and research institutions in Bulgaria. Opened in 2015, the museum architecture uses green technologies to generate and save energy. The museum has over 100 interactive, hands-on exhibits especially designed for children, including energy-saving devices that also form part of the activities for children. At the center of the museum is a gigantic tree uniting the three floors: they feature archaeology, geology and anthropology in the past; nature, architecture and urban design in the present, and space technologies, energy and communications in the future.

muzeiko.bg/en

IMPRINT

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