From Heart to Head to Hand: A Synthesis of Issues & Strategies Raised at the From Content to Play Symposium

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On June 4-5, 2005, more than 160 museum educators, designers, researchers, architects, and consultants gathered at the J. Paul Getty Museum for the symposium “From Content to Play: Family-Oriented Interactive Spaces in Art and History Museums.” Symposium panels and discussions focused on several key issues faced by museums as they engage in the creation of interactive spaces and experiences for families. How can interactive spaces best respond to the needs of family audiences? In what ways can museums collaborate with artists and art schools in the creation of these spaces? What is the role of the object, and how should works of art be used and interpreted? What are the relative merits and challenges of high-tech versus low-tech design strategies? What can we learn from the architect’s perspective? How do our values and philosophies shape the spaces we create?

This two-day symposium offered participants a diverse and sometimes dizzying range of exceptionally rich and thoughtful presentations on critical issues and innovative strategies. It is with a combination of excitement and anxiety that we take on the task of synthesizing these issues and strategies. Our goal in this synthesis is not to provide answers to the questions raised above, but rather to offer a framework to guide continued reflection on these issues and ideas.

Our task is made challenging given that symposium participants represented a wide range of museums across the country, all with varying institutional realities and degrees of experience relative to interactivity and family audiences. At the outset, Patterson Williams, Master Teacher for Asian and Textile Art, Denver Art Museum, asked participants to indicate whether their museum had an interactive space for families. Approximately one-third of participants indicated they had no such space, but were thinking of starting one in the near future. Another one-third were in the process of creating such a space, or had newly opened such a space. The remaining one-third had extended experience with family-oriented interactive spaces in their museum. With that in mind, we realize that there is no “one-size-fits-all” approach to creating family-oriented spaces in art and history museums. In fact, symposium discussions confirmed that solutions and strategies are highly dependent upon the nature and culture of one’s institution. What seemed most useful in terms of a symposium synthesis then was to organize the various issues and strategies raised and, where appropriate, to augment the discussion with mention of relevant research findings related to interactivity and families.

In reviewing our notes from both the panel discussions, and hallway conversations, we were struck by the way the ideas seemed to hang together around a three-part framework: (1) those related to vision and intention (we call them Heart qualities); (2) those related to perceptions and conceptions about visitors and learning, organizational and professional values (Head qualities);
and, (3) those related to logistics and implementation of our visions and specific ideas or the “doing” practical part of the process (Hand qualities).

This framework became a useful way for us to think about, and ultimately summarize, the critical issues, processes, and assumptions raised during the symposium. What follows then is a discussion of this framework, as well as a discussion of the over-arching principles or guidelines that emerged from the symposium that might assist practitioners no matter their level of experience with family-oriented interactive spaces.

**Heart Qualities**

During a question and answer session following her panel presentation, Sherry Hoffman, an architect with (M)Arch., repeatedly made a small meaningful gesture – touching her heart – as she explained how her team came up with their ideas for family-oriented spaces. For us, this gesture symbolized the heart qualities – the passion, the aesthetic beauty of a core idea – which are necessary in creating successful family interactive experiences. Heart issues are those that draw upon intuition and creativity. Throughout the symposium, we heard repeated references to two particular sets of heart issues: (1) clarity of purpose, and (2) simplicity.

**Clarity of Purpose**

One of the central take-home messages from this symposium was the importance of being clear about the purpose of the family-based interactive experience. What is the core premise or intention of the project team? What is the vision – the spirit – that drives both the process and the product? Does this vision genuinely excite the project team? The heart of an interactive experience should be easy to explain in a few words. It is the what, why, and for whom of the experience. There is no recipe for the creation of this vision but there are some strategies.

First and foremost, the team needs to be clear about the content that is at the core of the interactive space. Kathryn Blake, Associate Curator for Education, Phoenix Art Museum, shared with participants that what drove the development of their ArtWorks Gallery was the belief that experiences in interactive art museum spaces lead to different learning outcomes than do experiences in the rest of the museum. More specifically, the team emphasized the inherent value of the original work of art; this belief informed all aspects of the design in their space. Blake shared how the team wanted to instill in families a reverence for the object, the skills to interpret the object, and the confidence to do so.

Equally important at this stage of the process is thinking through how each feature of the interactive space will connect to the core premise. This alignment ensures a unified space. Julia
Forbes, Head of Museum Interpretation, High Museum of Art, shared their struggles with the creation and evolution of a core premise. In the absence of an overall clarity of purpose for their Family Gallery, the project team had no criteria for deciding what to develop further and what to leave behind. However, once the team embraced the core premise of creative play, the development process moved more smoothly. In addition, the High Museum’s audience research revealed that visitors knew when a specific activity veered away from the core concept.

In addition to being clear about what is at the core of the interactive space, it is necessary to clarify why the space is being developed. What purpose will it serve? Several presenters raised issues related to the function of the space. Will it be a teaching or a learning space? Teaching implies a more directed and/or staff-mediated experience and learning suggests a more free-choice, visitor-driven experience. How and who will use the space the most determines the ultimate core premise and the specific physical look of the gallery. Kathryn Blake clearly established that their Art Works Gallery would not involve staff or docent facilitation. Consequently, content development and design kept this vision in sight and the result is that visitors understand what they are to do and why. Several museums ask their interactive galleries to serve double duty – to serve families and school groups. Presenters acknowledged that these two audiences had different needs and requirements and that educators needed to be clear about which audience was the priority of the gallery, accepting that the gallery may or may not function as well for the secondary audience.

Finally, who is the interactive space intended for? Will the space target children, and if so, which age range specifically? Or will the space be designed to appeal to both children and adults?

Simplicity

The second theme within heart qualities is related to the notion of simplicity. Simplicity is not synonymous with easy or simplistic. Several presenters and participants raised issues relative to ensuring that interactive spaces do not “dumb-down” the museum experience. Rather, the core and basic content should be rich but not complicated. When interactive activities flounder it seems to be a problem of overload – asking too much of the physical configuration as well as too much of the visitor’s attention and time. The heart seeks clarity and clarity is simplicity. There are no qualifiers or codicils. As you move into the intellectual, rational parts of the process it is
easy to get complicated. Continually drawing back to the core premise will keep the integrity of the intention.

Patterson Williams, Master Teacher for Asian and Textile Art, Denver Art Museum, spoke to this issue. She shared various strategies used by her team to create an interactive family-oriented space using simple, straightforward activities that could be brought out on the floor each day and packed up and stored at night in the small storage space available to them.

**Head Qualities**

Moving from the heart to the head, many presenters addressed issues and ideas related to pedagogical perspectives, values, and theories underlying the creation of family-oriented interactive spaces. Specifically, four themes emerged across the discussions: (1) organizational philosophy, values, and commitment; (2) assumptions about learning; (3) assumptions about the aesthetic experience; and, (4) assumptions about visitors.

**Organizational Philosophy, Values, and Commitment**

In their presentation, the architects from (M)Arch. pointed out that “space mirrors values.” In other words, interactive, family-oriented spaces in museums are a physical manifestation of intention and spirit. In listening to presenters describe their various family spaces and programming strategies, we were struck by a simple observation: the existence of these spaces says something about the values of the institutions in which they are housed. With that in mind, it becomes critically important to understand the values of your own institution and how they inform the space that you want to develop or are developing.

Institutional commitment is a key ingredient. Jean Sousa, Director of Interpretive Exhibitions and Family Programs, Art Institute of Chicago, shared the successes and challenges of developing three interactive exhibits in their Kraft Education Center – Art Inside Out, Telling Images, and Faces, Places & Inner Spaces. The first step was for the museum to treat the family exhibitions with as much seriousness and attention as any other museum exhibition. Then, advisory boards were established for all three exhibitions, and at one point, directors from the various departments were included on the board in order to solidify institutional commitment to the project. While Jean has clearly created an incredible legacy of family-based interactive projects at her museum, she was candid about the many false starts and lessons learned over time. We encouraged participants (and encourage readers of these papers) to take inspiration from presenters, but understand that you need to find your own institutional starting point and begin to build internal commitment for your project in ways that will help you accomplish your particular goals.

Symposium presenters also pointed out that it is important to create an interactive space that supports the overall mission of the museum, but that provides a unique experience within the museum. Anne Henderson, Director of Education, and Melissa Certo-Hayes, ArtQuest Educator, both from the Frist Center for the Visual Arts, talked about how they created a mission statement for their ArtQuest space that was agreed upon by their board. That resonated with us – what a
wonderful way to not only ensure ongoing clarity of purpose, but to make explicit underlying values and philosophies guiding the development of the space.

Assumptions about Learning

During the two-day symposium, presenters shared a wide range of approaches to the development of family-oriented interactive spaces. Kathryn Blake talked about designing targeted interactives for their ArtWorks Gallery that are intended to accomplish specific outcomes – in this case, to encourage transfer between the object and activity. If people do not make such connections in the space, Blake considers their experience unsuccessful. Cynthia Moreno, Curator of Education, Speed Art Museum, and Beverly Dywan, Principal, Design in Three Dimensions, emphasized the importance of the artistic process in their Art Sparks Gallery. They attempted to create an open-ended, immersive experience that allows for different outcomes depending on the person or group. Robert Sain, Director, LACMALab, Los Angeles County Museum of Art, as well as Lisa Buck, Manager, Fairfield Community Arts Center, and Julia Forbes talked about play and the importance of a participatory approach to the development of interactives.

What do these various approaches mean in terms of assumptions about learning? The message we drew was that there is no right or wrong answer. Again, the important thing is to be clear about your definition of learning, and the learning outcomes you seek to achieve in the space. If the concept of play is most important to you, then your resulting space will look much different than if the notion of making connections to original works of art is what drives you. What is important is that the project team clearly articulates their underlying pedagogical assumptions.

Another key aspect of interactivity involves understanding the family audience in museums. Surprisingly, there was little discussion at the symposium of research on families, and what we know about how they learn. However, presenters clearly assumed that there was something unique about families’ experiences in the museum – something that required a special space for them in order to meet their needs and accommodate their unique learning processes. Marcia MacRae, Interdisciplinary Arts Specialist, DuPage Children’s Museum, talked about the extensive testing they undertake at the DuPage Museum with children and parents in order to understand their reactions to objects. MacRae emphasized the importance of familiarity – families and children had an easier time making sense of and connecting to objects that had some aspect of the familiar to them (i.e., an installation of a bathroom sink).

MacRae’s observations are confirmed by recent research on family learning in museums. Studies suggest that families construct meaning through their conversations (Ash, 2003; Borun et al., 1998; Crowley et al., 2001; Ellenbogen, 2002). For instance, in a study designed to document the nature and extent of family interaction and engagement with a science exhibition about biological, medical, and cultural aspects of bones, Luke et al. (2002) found that families related exhibition content to their own family history. Data from recordings of families’ conversations indicated that family members shared stories of broken bones (prompted by X-rays in the medical section of the exhibition) or discussed what the family dog might look like without its fur (prompted by skeletal models of animals in the zoo section of the exhibition). As they looked
at the objects, families shared information and personal stories in an effort to make meaning from what they were looking at. Understanding this process ensures that interactive spaces can be designed to promote family conversation and meaning-making.

Also inherent in the design of interactive spaces are developmental issues. One the greatest challenges in this process is creating a space that will work for intergenerational groups. For instance, The Getty’s Family Room – discussed by both Peggy Fogelman, Assistant Director and Head of Education and Interpretive Programs; and Rebecca Edwards, Education Specialist for Family Audiences – has a small, enclosed space with cushions, pillows, and reading material which seems to appeal not only to small children, but also to older children, and even adults, who can sit and read independently. The main message here is that not everything in an interactive space has to be appropriate for all ages. Rather, we encourage a more holistic view of interactive spaces – on the whole, the space needs to work for various ages, but on their own, each individual exhibit or interactive might work for a particular age range.

**Assumptions about the aesthetic experience**

A clear thread running through the various symposium presentations was related to values about the aesthetic experience. Both presenters and participants raised more questions than solutions around connecting the experience in an interactive space to the objects and experience in the rest of the museum. For us, the important point here is to really question the values at play. Is the idea that visitors should leave the family gallery spurred to visit the rest of the museum? In other words, should an interactive gallery motivate families to spend time with the permanent collection?

On the other hand, is it enough that, within an interactive gallery, families engage in experiences that somehow connect them to the rest of the museum? In articulating assumptions about the aesthetic experience, it becomes important to clarify the role of the object. Is it most important for your team to put the object front and center, and work out from that or do you wish to draw inspiration from the collection and allow families to explore for themselves? During informal discussions it was clear that conference participants had very strong feelings about what constituted an optimal aesthetic experience. So while we espouse the notion that there is no one right way to design a family interactive gallery, we acknowledge that there are some firmly held beliefs that, in effect, cause practitioners to see the issue as right or wrong.

**Assumptions about Visitors**

The final head issue that emerged across presentations was related to visitor expectations, behavior, and perceptions. Do families see art museums as places to spend time together? Do they see themselves reflected in these spaces? We would posit that art museums still have some work to do if they want to be seen within their communities as family-friendly places. Our evaluation studies have suggested that families perceive the art museum as either unfriendly or inappropriate for young children. Repeated experience with a family interactive experience indicates that, over time, families relax this misconception and are willing to gradually venture out into the rest of the museum, often with the help of assistance such as activity packs and
family guides. We hope that there is a slow paradigm shift happening here. As museum professionals, we need to change public perception of our institutions. But more importantly, if we say we are a place for and about families, then we need to mean it. Those values need to be mirrored in our institutional identities and actions. Andrew Alvarez, Museum Access Consultant, reminded participants that the perception of museums as places of no touching still persists, and yet the art experience is more than just visual. It is also tactile and kinesthetic. The creation of interactive spaces within art museums creates a certain kind of tension between fun and contemplation, between touching and no-touching, between conversation and silence, that must be broken down if interactivity is to survive as a core element of our institutions.

It is also important to embrace how and why families come to the museum. In talking about the UnMuseum at the Cincinnati Contemporary Arts Center, Lisa Buck, currently Manager, Fairfield Community Arts Center, mentioned visitor research that was done in support of a particular interactive exhibition. Results from this research suggested that parents did not care “if they learned anything” but rather wanted a rich, shared experience with their children. A similar finding emerged from the study of the Speed Art Museum’s Art Sparks family gallery.

**Hand Qualities**

Once the inspirational and conceptual foundation is set, developers of interactive family spaces have a wide range of logistical issues to address. Presenters raised a number of issues that fell into three main categories: 1) Design as Pedagogy; 2) Technology; and 3) Implementation & Maintenance.

**Design as Pedagogy**

It is in the construction of a family interactive space that you manifest your vision, intention, philosophy, and attitude concerning family learning in museums. Although we are tempted to think we can control what people learn, the only real control educators have is in the creation of the learning environment, in this case the family interactive space. The learning environment includes both the built space and every activity or experience that can happen there.

Many presenters offered examples of design strategies and pitfalls. In fact, one strength of this conference was that so many people were willing to expose their process and allow participants a chance to learn from their mistakes. Some key themes across these presentations related to design as pedagogy included issues of uniqueness, attachment to ideas, simplicity, and cues and transitions. While the idea of making the overall experience unique within the museum, this idea relates to making the specific activities and designs something that is unusual for visitors. As with any good idea, this one, too, can be taken to an illogical extreme. The quest for the unique can become the goal for educators and designers, leaving behind how families learn and want to access the space.

Recognizing attachment to one’s own ideas or design solutions appeared to be another practical design issue. As Hemingway advised, you have to be willing to “kill your darlings” and release ideas and designs, however inspired, when they cease working with the larger vision and concept.
for the space. When ideas struck us as inspired, we noticed that they were surprisingly simple and straightforward. As we discussed the importance of keeping the core vision and concept central, so too must the specific activities and experiences be kept simple. The greatest advice that the family gallery development team at the High Museum of Art was given was for one of the architects working on the new building to tell us to be careful about trying to make the individual areas do too many things. He encouraged us to keep to the core principle and keep it simple. Spock (2004) noted that most interactive experiences fail because we overburden them, ask them to do too much. This was reflected in one of the participant’s comments that we, as educators, are caught in a tension between teaching content and keeping it open-ended. What sometimes happens is that we try to do it all, consequently doing neither very successfully.

Even though educators and designers are initially clear about their intentions and philosophy, the physical design of the space will not necessarily reflect that thinking without conscious and repeated alignment between the conceptual and concrete. Borun (1998) identified seven characteristics of family-friendly exhibits, many of which were raised by presenters. First, the experience is multi-sided so the family access it from different directions. Second, multiple users engage simultaneously without crowding. Third, different sized visitors (children and adults) are comfortable while using the activity. Fourth, visitors derive a variety of outcomes and the experience is complex enough to stimulate discussion. Fifth, a successful interactive experience appeals to a range of learning styles and knowledge levels. Sixth, instructions are easy to read (visually and/or verbally) and clear. Seventh, the experience is relevant to visitors’ lives and experience.

Andrew Alvarez, former Project Manager for the Wolverhampton Art & Museum Service, UK, observed visitor’s confusion and hesitancy when allowed to touch works of art. Children tend to run straight to the work and touch it, then invite someone else to touch. Adults stand back, read, and watch others interact before engaging and/or quickly try to stop their children from touching. He found that signs inviting visitors to touch had to be very prominent. This supports what we have found in our program evaluation studies; visitors do not “do subtle,” they need unambiguous, easily seen and understood cues to demark things that can and cannot be touched.

Technology

Even before the technology panel presented, there were many references to tech-related issues. Three key themes emerged during the presentations and discussions: appropriateness, uniqueness (again), and human behavior. These themes are by no means the only or the most important themes; they are the ones that were most frequently addressed at the conference.

The technology panelists presented a wide range from low- to high-tech applications in family galleries. Patterson Williams, Master Teacher for Asian and Textile Art, Denver Art Museum, shared a number of creative “no-tech” approaches. The decision not to use electronic technology was based both on budget and space requirements. Her family gallery shared space with the school tour program so a quick installation and de-installation was a key part of the design, precluding the use of complicated electronic set-ups.

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Those presenting on the use of high technology explored the importance of unique applications of computers. Spock (2004) holds that much of the uninspired use of computers in museums is a “by-product of a lack of development imagination.” The work of Susie Wise and Sheila Vyas of Stanford University demonstrated how rich and exciting an imaginative use of computer technology could be. Like Spock, Wise and Vyas noticed that many computer interfaces in museums were unimaginative; they resembled the way computers look in our offices and schools. To replicate that environment in the museum was not desirable to the Stanford team. Their solution, to use computer technology to develop an interactive “coffee table” activity, combined a creative use of technology within a structure that was familiar, intuitive, and accessible to groups of children and adults. Similarly, Lisa Buck, developer of the UnMuseum, described ways in which artists used computer technology invisibly. For example, sensors detected visitor presence and enabled them to direct the movement of a sculpture.

A problem for many museums is that the use of even the most basic levels of computer technology is beyond the budget of many family galleries. In addition, because access to very sophisticated computer hardware and applications is increasingly easier, it is possible that many visitors have more up-to-date and exciting technology in their own homes than do museums.

**Guiding Principles**

When Peggy Fogelman, Assistant Director and Head of Education and Interpretive Programs, J. Paul Getty Museum, gave her opening remarks at the outset of the two-day symposium, she acknowledged the lack of any clear formula for the development of interactive spaces in art and history museums. Much of the process is determined by institutional realities, the nature of your particular audience, and your core pedagogical values. At the Los Angeles County Museum of Art, it made sense for LACMALab staff to commission works of art from collaborating artists, given that they were attempting to create a highly participatory learning lab. But does that make sense for you and your institution? At the High Museum of Art, it was appropriate for Family Gallery staff to work from reproductions of works of art, given their core premise of play. But will that work for you and your institution?

Having repeatedly emphasized the point that context clearly matters, we run the risk of being criticized for reducing the process of developing interactive spaces to an entirely individualized phenomenon – one which will look completely different from one institution to the next. On the contrary, we believe that there are a number of over-arching guiding principles that can be kept in mind no matter what or where your institution. We offer these below in an attempt to initiate the dialogue; we encourage participants and readers to add to this list in the coming weeks and months.

- Take risks.

As we listened to presenters at this symposium, we were struck by the extent to which they were clearly willing to experiment, to take risks, and to push the boundaries of their
thinking and creativity. In his presentation, John Frane, Architect, Predock Frane Architects, commented that it is the “edges that help you figure out who you are.” This statement has stuck with us; it embodies the importance of working outside of your comfort zone. We would add to it the following advice: work from your heart; maintain a sense of humor; take your work seriously, but not yourself; and learn from both your successes and your failures. In the words of Robert Sain, Director, LACMA Lab, “if you’re going to fail, go for failure on a grand scale.”

➢ Collaborate.

The development of interactive spaces is not a solitary endeavor. Cynthia Moreno, Curator of Education, Speed Art Museum, and Beverly Dywan, Principal, Design in Three Dimensions, spoke of being co-learners in the process of developing ArtSparks. John Frane and Hadrian Predock, Architects from Predock-Frane Architects, talked about a “projective practice” model that breaks traditional boundaries and encourages architects, designers, and museum professionals to work together in new and innovative ways – a model where designers and educators challenge each other to think differently. However, while collaboration is clearly key, there is a tipping point at which there suddenly become too many people involved in the process. How many advisors does it take to make an interactive museum space? In delivering this synthesis at the Getty conference, we joked that perhaps the team needs to be able to fit in the space being developed. Clearly, some thought needs to be given to the right number of collaborators on the team.

Another guideline here is to branch out from your usual circle of collaborators, and not just work with your friends. Find people who are different from you, and will bring fresh, new (and perhaps even competing) perspectives to the table. This includes not just colleagues, but also members of your target audience. Peter Exley, Architect, architectureisfun, Inc., reminded us of the importance of including the voice of the child within the developmental process.

➢ Study.

It was intriguing to us that although many presenters and participants flirted with questions of what people are learning from interactive spaces in art and history museums, there was little substantive discussion of these issues during the symposium. To be fair, this is a complex issue. All of us believe in our hearts that there is meaningful learning happening in and from these spaces. We believe that these spaces are making unique contributions to people’s museum experience. But it is difficult to say exactly what that learning looks like. In our minds, this is the next logical step for the field – research and evaluation needs to keep stride with design and development. Does what goes on in interactive spaces lead to different learning than that which occurs in the rest of the museum? Does the learning process look different, and if so, how? What is the nature of the learning outcomes that result from an interactive experience, both short-term outcomes and long-term outcomes?
We were impressed with the quantity and quality of formative evaluation and prototyping that was referenced during the symposium. Presenters spoke of advisory boards that included visitors’ perspectives; they talked about how they took mock-up components out on the floor and tested them with families and children. There were numerous examples of creative, cheap and cheerful approaches to conducting front-end and formative evaluation. However, there was little discussion of summative evaluation, conducted to assess the extent to which the overall space accomplished its learning goals. What are people taking away from their experiences in these spaces? We would suggest that this is where we need to go next as a field. Studies are needed that begin to investigate aspects of this question, and effective dissemination strategies are required so that the findings are shared and integrated across the museum community.

On the whole, this two-day symposium has provided more food for thought that we can possibly digest. We hope that this quick synthesis has helped to organize some of the more salient ideas and strategies that emerged, and that it will guide continued reflection on these issues. It is an exciting time for art and history museums, as these institutions work to maximize their relevance within the larger educational infrastructure. The ongoing development of family-oriented interactive spaces represents a significant shift within these museums – an attempt to more directly respond to a growing segment of museum-goers.
References


