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Designing Environments For Kids

Experiencing Environments

The nature of museums is changing. Many of us recall the museums of our youth as dusty Victorian establishments filled with cases, endless text and (if we were lucky) a single button that when pressed (sometimes) activated a model of a steam engine or other fascinating feat of engineering. Today, families visit museums expecting a tactile, multi-sensory experience. Concurrently, other spatial environments see changes happening too, perhaps taking a lead from museums, parks and other civic spaces which encourage interaction and experience. There are still a few of those pristine museums, but many now see their focus not just as collections based receptacles, but as environments that inspire through quality of experience. It's not all about touching; an art museum can't let you feel the brushstrokes on its Van Gogh, but it might let you focus in on it, teach you how to look in new ways, then lead you to a studio where you experiment with real paint and real brushstrokes. A science museum introduces you to robotics by letting you "play" with it's souped-up Lego® exhibit. Even the local historical society transforms into Main Street to host an old-fashioned 4th of July parade (or any other poignant celebration). Successful museums are now as much about doing and learning through experience, as they are about showing and seeing.

Nowhere has the envelope been pushed more than with children's museums. Interestingly, unlike long established science museums or art galleries, the children's museum has never had to reinvent itself. With a couple of notable exceptions, children's museums are a relatively recent phenomenon and have always been about learning through play - and for

those of you that can't recall, that involves a lot of exploring, touching, running, smelling, jumping, tasting, listening and making noise.

Museums as Communities

Many children's museums begin as grass roots organizations in small communities or neighborhoods - often it's a few motivated parents or teachers who provide the impetus. The sense of community ubiquitous to any children's museum makes relationships between park districts (or other public agencies) and these institutions mutually beneficial. The range of collaboration varies; the DuPage Children's Museum has leased space from the Wheaton Township Park District for several years, while the Arizona Museum For Youth in Tempe, AZ is actually a department of its city's government. Common to all of these unique relationships is the dedication to a mission of serving communities and families. Children's museums are very tangible beacons; not only are they cultural assets, but a source of community pride, catalysts for tourism as well as diverse places of inspiration for children and their caregivers. The marriage of public agencies and cultural institution seems to be thriving; it's hard not to see such relationships as anything but healthy.

Making A Museum

Of course, museums don't happen overnight. A grass roots committee is well advised to seek collaborations with key individuals and organizations in developing its mission, its programs and its ultimate home. The Association of Youth Museums and American Association of Museums (AYM, (202)466-4144 and AAM (202)289-1818) in Washington DC provide an invaluable network of experience, publications and annual conferences. Both organizations have specific materials to assist start-up museums. Developing key strategies and leadership in the fields of fund-raising, architecture and design (of both building, or adaptive re-use and exhibits) alongside programming is an essential first step in creating a museum.

In our experience (designing and developing programming for over a dozen museums and exhibits), we stress the value of a collaborative effort in planning and developing a museum and its exhibits. The perspectives and issues involved in design, education, and project management are inseparable. All need experienced and dedicated advocates.

Educative Design

“Educative Design” is a philosophy that we have created from our unique perspective as both educators and designers of environments for children. This provides direction, criteria and approaches to design and recognises the following;

- Pragmatic and developmental needs of all users are a foundation of good design
- A desire to inspire through environment and experience
- Designers, educators and clients have common pragmatic, developmental and inspirational values and needs that form the basis of a good program

“Educative Design” is a good expression of the importance of design that educates, and design that is educated. All of the examples used here, have Educative Design as their core philosophy.

Museum as Park Facility

In 1994, the Exploration Station, a children’s museum and facility of the Bourbonnais Township Park District, felt ready to expand from a small rented facility. They approached our firm (Peter J. Exley Architect) as specialists in educative design. A local architect was included to interact with our specialized firm. This afforded the project an expert consultant with significant national experience of children’s museum design and programming. The interaction afforded a relatively small community a design team able to focus on issues pertinent to their community alongside the creation of a children’s museum with amenities on the cutting edge of museum design. From the outset, dialog with the local community was

integral to the project. Key presentations and meetings amassed information, opinions and reactions that were then interpreted using the Educative Design process. All such projects benefit from the contributions of the following groups and individuals;

- Community and local interest groups
- Focus groups (residents, families, teachers, local business etc.)
- Museum Board of Directors (if applicable)
- Local media (tv, radio, newspaper, chamber of commerce etc.)

Initial focus groups helped articulate “wish-lists” of children, caregivers and others alike, as well as introducing everyone to the process of design and architecture; these exchanges were very much a two-way street of learning for both architect and the community. There were many public presentations as the design progressed, and local media ran articles, publishing drawings as they became available. Maintaining public ownership of a museum as it evolves is crucial in gauging reaction, and igniting action by investing individuals and businesses in their new museum.

Another major challenges posed by the Exploration Station was its site on the Perry Farm property. The location was pristine on acres of park reserve alongside the Kankakee river. The placement of a building sensitive to the site, but also reflecting the buildings function was an interesting challenge. Ultimately the museum became a series of buildings that looked as though they belonged on a farm. Giving children a sense of ownership and security in their museum grew from the Educative Design philosophy. The museum is clearly intended for children with features such as an A thru Z Garden taking advantage of the building’s orientation to outdoor play spaces. Varying scales of interior space, whimsical shaped windows (great opportunities to view the world from inside and out, from different vantages), and some unusual materials and colors reinforced emphasize the function of the structure

too. Nestling in the preserved landscape (no trees were felled, and the building was designed to sit within the existing shade of several mature oaks) many visitors wonder if the building is a renovation of existing structures. Of course it isn't, but everyone is flattered that the creation of a new building in an idyllic setting is complimentary to nature.

So designing the building to be attractive architecture is in many respects subservient to recognizing its potential as a place for play, learning, tourism, public assembly, and fun. The key to the Exploration Station's success has its roots in architect, community and client coming to know each other, spending time and working together. Maintaining this relationship beyond the opening of the museum is important too. Even though the Exploration Station is open, we continue a dialog with our client; it's important to review how the building functions and to integrate change within the design - the Educative Design process continues to evolve and grow with the museum and its community.

Using the philosophy of Educative Design enables a design team to structure its solutions, to assign appropriate hierarchies, and to ensure that the proposed solution responds appropriately to its locale and its needs. The Exploration Station is very successful in that regard.

Museum as Public Entity

There are many pragmatic issues inherent to the building process that are sometimes magnified when a community decides to build a museum. In turn, these are magnified when that museum is geared to children. Invariably, safety is always crucial in building design; above all else it is the one thing that everyone is ultra-sensitive too in the design of projects for children. Beyond the use of materials and detailing (fall zones and corners are two of the obvious issues), the paradoxes of means of egress and single supervised points of entry and

exit challenge every design and require careful investigation, consultation with consultants and specialist agencies, and thorough implementation.

Kids On The Fly is a facility under the joint banner of the Chicago Children's Museum and the City of Chicago Department of Aviation in O'Hare International Airport. In an environment already especially sensitive to every aspect of safety, both these institutions and their consultants approached the design and development of this project with extraordinary care. Part of this process invariably involves apportionment of realistic schedules and budgets, sensitive to an organizations ability to fund-raise, their reliance upon pro-bono contributions (very few children's museum projects exist without significant in-kind contributions), and a myriad of other criteria, unique to every project and location. Kids On The Fly paid extreme attention to issues of accessibility (working throughout with the Mayor's Office For People With Disabilities) striving to set high standards for allowing any child or caregiver exemplary access to this amenity. To that end, audible and tactile interpretation of the project is available, and the best way to access the exhibit's centerpiece cargo plane is via a ramp lined with interactive cargo and fabulous views of O'Hare's runways - it's a magnificent proactive solution. There's a wonderful balance of the pragmatics, developmentals and inspirational that are the foundation of Educative Design.

Frequently, such pragmatic issues may seem to overshadow issues of development and educational mission, or the inspirational aspirations of a design. On the contrary, thoughtful and completely successful pragmatic resolutions invariably lead to wonderfully challenging and inspiring museums. Sometimes we have observed that overly-focusing on inspirational criteria can lead to rather awkward ill-functioning conditions without much needed inherent flexibility.

Future Developments

As museums develop and become places of play, learning, entertainment and often retail experience too, so other environments look towards the successes of museums in their interaction with children and caregivers. Recently, the firm of Wolff Clements Landscape Architects, the Chicago Park District and our design firm collaborated on the creation of a prototype neighborhood park at 63rd and Racine Streets in Chicago. A small conventional playground and large play-lot within Ogden Park has given way to a secure fenced and landscaped environment complete with interactive water features, flexible inspirational areas geared to art making, story-telling, family pic-nics (or whatever use creative camp leaders, teachers or caregivers assign), a carousel, a performance area, lots of places to sit, as well as a huge array of the latest play equipment. In part, a project like this owes much to the ground breaking explorations of children's museums. The recognition of the importance and power of play in the development of children, the importance of adult interaction in that development and the commitment of public and private, profit and charitable organizations are criteria crucial to the creation of meaningful places and spaces for children, their families and schools. Many times, we have found, the children's museum is an excellent opportunity for excellent chemistry in that regard. And there are many lessons in the process of Educative Design that can be applied successfully to enhance our approach to the design challenges in the parks and buildings of our communities.