



Supported by a grant from the Institute of Museum and Library Services (IMLS), the Safari Adventure Advisory Committee Workshop was held on March 11, 2013 at the Bronx Zoo, with the following experts and educators in the fields of children and nature education, hands-on and place-based learning, and digital learning: Professor Louise Chawla, educator David T. Sobel, Urban Assembly high school principal Mark Ossenheimer, researcher Ingrid Erickson, and noted author and environmentalist Richard Louv.

Through this workshop, we obtained scholarly input for the purpose of assessing the conceptual design of Safari Adventure within the framework of promoting connections to nature and other related informal learning themes, including multi-generational learning.

Summaries of all leading remarks and other conceptual takeaways from the workshop are recounted in the following pages.

Contents

Summaries of advisors’ leading remarks—

- David Sobel 2
- Ingrid Erickson 3
- Louise Chawla 4
- Mark Ossenheimer 5
- Richard Louv 6

Group Discussion / Workshop Takeaways—

- Group Discussion / Workshop Takeaways 7

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“Thank you, Rock”

David Sobel – Author and educator who focuses on place-based education; director of teacher-certification programs at Antioch University New England

We asked David Sobel to provide leading remarks on the topic of facilitating discovery. In his remarks, he outlined recurrent play motifs that are observed when children have access to semi-wild places to play; places that are safe and where there are things to manipulate. These play motifs can be incorporated into nature design principles and are outlined as:

- hunting and gathering activity potential
- the notion of “small worlds,” that is, designing at a kids scale and creating special immersive spaces with the potential for adventure
- maps and paths, or creating a diversity of ways to move through a landscape
- “animal allies”

David’s observations were punctuated by a story he relayed about observing children play around a rock outcropping in Central Park, where the children created their own activities that enacted some of the above-mentioned motifs. As the children were leaving, a child who’d forgotten his hat by the rock raced back, grabbed his hat, and said, “Thank you, Rock.”

Interestingly, in David’s opinion, wide-open vistas—elements of designed nature spaces that may intuitively (to adults) feel exciting—could actually discourage discovery (later on, Louise Chawla offered a rebuttal—that vistas are effective...when they are led up to by winding paths where you don’t know what’s next). David also provided warning to be wary of any sense of the “obligation to instruct.”

But the “thank you, rock” story illustrates the affective hope we have with our Safari Adventure project and it was then good to hear that David believes that many of the activities we would be developing with Safari Adventure are on the right track. David pointed out path design and hands-on physical elements of Safari Adventure that both facilitate discovery and show the value of nature play.

“This is What’s Coming in the Gate”

Ingrid Erickson – Research fellow at the Social Science Research Council; research associate at the Joan Ganz Cooney Center

Ingrid Erickson’s leading remarks concerned the topic of integrating technology. In terms of developing nature spaces, understanding what to expect is the first step. So, armed with collated results from PEW research surveys, as Ingrid put it, “this is what’s coming in the gate”:

- expect that about 50% of visitors entering the Zoo will have smartphones
- gadget ownership among teens age 12-17 show that 77% own cell phones
- smartphones are for many a *primary* computing device
- among activities measured, taking pictures and text messaging are what people are doing

Ingrid encouraged the view of technology and social media as opportunities. The way smartphones and mobile technologies are being used inform this view. Ingrid identified sharing as one way people make sense of things they experience, with picture-sharing becoming ubiquitous. We’re now also increasingly desirous of same time, real-time data.

So a suggestion would be to focus on providing those possibilities and affording new insights in any potential mobile app or service, as opposed to developing something solely to convey content or that might function *in lieu* of the zoo experience.

Along these lines, Ingrid presented examples such as Project Noah, a citizen science tool, which builds on multiple user input to create what she called “aggregate stories.” In this way, the voice of peers and crowds reveal something together, as opposed to a more traditional, and singular, voice of authority.

“A Contagious Attitude of Attention”

Louise Chawla – Professor of Planning and Urban Design, University of Colorado at Denver; board member of the Children, Youth and Environments Center for Research and Design

Louise Chawla’s leading remarks on multi-family and intergenerational learning introduced and defined critical concepts of child development: joint attention and role modeling.

Joint attention alludes to shared, bonding moments of focus between child and parent or family member. These moments can be framed by positive or negative emotions, but at its best, it's a moment (and perhaps later, a memory) of appreciation.

Role modeling refers to being receptive and willing to guide, engage, or encourage children’s interests and lay a foundation for empathy, such as towards animals.

As a positive example, one might recall a memory of being on your parent's shoulders at the zoo. These positive, shared behaviors and moments between families help instill a sense of wonder and “contagious attitude of attention.”

In Louise’s view, these are critical components in developing environmental stewardship. And it’s therefore most important people to reach the caretakers, parents and other family members who need to encourage children to make “free-ranging” discoveries and then affirm those discoveries.

Looking at Safari Adventure then, it’s necessary to ask what elements of the physical exhibit design or activities promote and foster such behaviors:

- will there be shade in Safari Adventure during summer months?
- are there sitting places and comfort zones for the families?
- will there be staff/docents to serve as role models to the caretakers themselves?

As a design group, Louise suggested we identify the conserving actions toward wildlife that we want people to come away with from Safari Adventure, within the process of designing for moments of appreciative attention and role modeling.

“The Greenest Borough”

Mark Ossenheimer – Principal of the Urban Assembly School for Wildlife Conservation

Mark Ossenheimer’s leading remarks provided a base context for better understanding our local community. First, Mark proceeded to perhaps surprise some in attendance with certain facts about the Bronx:

- Out of 62 New York State counties, the Bronx scores lowest in many socioeconomic areas, including highest poverty rate
- Yet, the Bronx is the greenest borough in NYC. However, according to Mark, families don’t access its green space as much as they could

At Mark’s school, over half of his students own pets and 70-75% of incoming sixth graders want to be a veterinarian. As part of his school’s curriculum, the students have read Richard Louv’s *Last Child in the Woods*, performed water-testing in the Bronx River, used the Bronx Zoo as a classroom space, and taken nature field trips.

Additionally, the parents of his students have childhood nature memories and experiences, given that some are immigrants that came from farms, or are African-Americans with connections to the South. Mark feels that the desire to connect or re-connect is there, and the question is how to provide it.

As far as the Bronx Zoo goes, it is a local gemstone that employs and educates but in the context of the Safari Adventure exhibit, Mark asked whether this exhibit and related programs can also educate parents on animal care (through mini pet-keeping workshops), hold green markets highlighting connections to where we get our food, or further focus on ways to be more local specific.

“A Convener of Nature for New York”

Richard Louv – Journalist and author of eight books about the connections between family, nature and community; founding chairman of the Children & Nature Network

As a driving force behind the idea that we need to reconnect with nature, Richard Louv put forward several views for fostering nature connections:

- what can our exhibits do to make people aware of all their senses?
- local focus (in this case, the Bronx "bio-region")
- "natural cultural capacity"—can we access local ethnic groups' cultural knowledge of nature?
- "natural teachers"—educators who make use of natural settings for both nature and other subjects

Additionally, Richard discussed family nature clubs—new, grassroots ways to experience nature in safe, "meet-up"-style groups. Families can set these clubs up themselves and toolkits to start them are available. Perhaps the Bronx Zoo or our Safari Adventure exhibit can be a destination for family nature clubs.

Overall, Richard's remarks provoked thought about larger roles that zoos can play in helping people see the future differently—"What does a city in the future look like?" Richard believes that future cities should be imagined less like *Blade Runner* and more as "incubators of biodiversity."

In terms of the Bronx Zoo itself, Richard asked, "can the Zoo function as New York's 'de-Central Park,'" the first of a home-grown node of sort-of a national park system for New York, a "convening place for nature." This could involve everything from planting native species, to maps of green roofs, to mounting national campaigns for similar civic arrangements.

Advisor Workshop – discussion takeaways

Summary of breakout groups and wrap-up

Major, overarching concepts of nature play that emerged from the day included:

- the importance of creating opportunities for childrens' own independent play
- the importance of reaching parents/caretakers for modeling behavior
- the importance of tiered experiences: pathways, multiple loops, overlooks
- perspective changes are good
- less explicit education and more full-bodied exploration and elements of discovery (more experiences, fewer facts/information)
- ensure that messaging placement does not conflict with discovery
- “immersion implies extended duration”—provide opportunities to linger and allow visitors to make sense of a place
- design for sitting places, shade, and comfort zones, water, for older adults
- maintain parent-child security and overcome fear
- local communities desire further nature connections; they may even have cultural knowledge to tap into
- examine local audience, their culture, practices, languages
- add more locally-relevant content
- youth may have a disposition towards animal care to also take advantage of
- instill message that we need to find ways that animals and people can coexist
- our senses are 'superpowers' to learn from and connect to animal senses
- technology is not an intervener but a supporter of the design experience and a tool for sharing/reinforcing memories, creating communities, and after-learning
- alter exhibit uses during different times of the year
- connect to citizen science/citizen naturalist programs

Larger picture items, either in which zoos can play a role or that zoo exhibition designers should keep in mind included:

- help people see future cities differently—as “incubators of nature knowledge”
- people tend to trust zoos so harness that outlook
- promote message that natural habitats are healthy for people
- parents can still learn from child-level messaging
- technology presents opportunities for visitors to: track progress, collect and share, tailor experiences and navigate

- the zoo experience doesn't have to be the whole thing—if the exhibit can at least be a spark to personal experiences, that would be great
- getting any positive, early experience is good, along the teaching opportunity to reach their parents