This session will explore responsively-designed playspaces.

If possible, preview this video in preparation for Janet Rice Elman’s talk on children’s museums:
http://www.youtube.com/watch?v=V0mCy9asVk0
I feel a little bit strange up here because I came more to learn than to speak. You will see throughout the course of my bizarre talk that I think children’s museums embody a very important message that is almost totally missing from the usual conversations about education: cultivating the imagination and a new culture of learning for a world of constant change. The ideas in this room are now more relevant than ever and well beyond the world of children. In what I call the arc of life learning, kids start out by cultivating their imaginations, but how do we take this sensibility all the way through life, to, in fact, people in retirement? There is major change before us right now. For the last hundred years or more, the fundamental infrastructure—transportation, electrification, communication—has had a very interesting development, basically defined by an S-curve. A period of invention is followed by a fairly radical period of transition where the invention, such as electrification, becomes the infrastructure through which everything gets done over a ten-to-twenty-year period. Then follow decades and decades of stability where we reinvent institutions, learning, and even what material to learn.

In the last few years of the 20th century, new technology innovations follow a dramatically shorter development and adaptation time frame. The game has now changed, but our institutions of learning have not. Instead of this nice S-curve that goes on forever, we now live in a world where the laws driving our infrastructure, the digital infrastructure in particular, are exponential and the once fairly predictable cycles may now be gone forever.

The half-life of any skill may now only be five years; it used to be thirty or forty years. You used to go to school to learn something that would stay with you for life. Not so today when we must be able to pick up new skills all the time. And we have to be willing to pick up those skills not by going back to school but by looking around us and interacting with people. Up until about ten years ago the major game was how we find stocks of knowledge and skills and then authoritatively transfer that knowledge. But today this game is changing so fast—knowledge is changing so fast—and the skills we need to just keep up are changing so fast—that we must participate in “knowledge flows”: creating knowledge on the fly more than simply learning things. In fact, learning and creating are now two sides of the same coin. So if the past hundred years could be defined by the principle of scalable efficiency and, in this case, how our schools decided to deliver on that principle, today the game is scalable learning. To prepare students in this world of constant change, we must reinvent learning for the 21st century. The ideas you have in this room are core to that re-invention: children’s museums don’t have to reinvent things, they have to help the rest of us understand the sensibilities you bring to the table and how your ideas can be scalable.

So, what won’t work today for learning in a world of rapid change? The Cartesian view of learning in which pedagogy is an issue of knowledge transfer, “I teach, you learn” won’t work anymore. We have now moved into a new world that requires a social view of learning. It’s no longer, “I think, therefore I am,” but rather, “We participate, therefore we are.” We come into being through our interaction with the world and with others. Understanding, but not necessarily knowledge, is socially constructed. Each person has to figure out for his or herself how to make something personal, and making things personal is the real essence of learning. This suggests we look at learning more like a kind of chaotic structure—interactivity to the extreme. How do we stimulate not only curiosity, but a sense of awe? Curiosity and awe bring us together. A beautiful example of awe is the “Blue Marble” shot taken from the Apollo 17 in 1972. This famous photograph has done more to unite mankind in a moment of awe than just about anything else and underscores that it is our world; let’s work together.

Something so deeply ingrained in the world of informal learning but so missing from almost all other theories of education, is the fact that the mind does not stop at the bottom of the head. My hand, my stomach, my proprioceptive feedback systems—my entire body—are integral parts of my mind. The embodied mind matters. If we just pour knowledge into a kid’s head, that is using only one part of his mind. But the learning approach taken in children’s museums considers the entire body as mind.

As I was preparing this talk, I picked up the Christian Science Monitor, which featured the headline: “Kayaking as learning: Navigating life’s knowledge whitewater.” A whitewater kayaker is the embodied mind, reading the world through the resistance of his paddle as he moves through the water. If the paddle and the water are not one, if the kayaker is not having a constant conversation back and forth, he will not live successfully through a white water rapid. In our interaction with the world, we under-estimate how much the world pushes back to us. It calls back. Listening to that talk back and learning how to interpret it is a big part of how we create and what drives our imagination.

Here’s a quiz. What do Jeff Bezos, the CEO of Amazon, Sergey Brin and Larry Page, the creators of Google—or “Google kids,” as I call them—Jimmy Wales, the founder of Wikipedia, and Will Wright, the original designer for The Sims games, have in common beside being a bit creative and out-of-the-box thinkers, doers and tinkers?
you think about a place, what do you think of?” Here are some of the answers, some expected, some not:

- **A place is here. (From a toddler)**
- **A place is my Mummy. (From a two and a half-year-old)**
- **A place is today. (From a three-year-old)**
- **A place is a city where [there are] some birds, where there are those fake lion statues. (From a five-year-old who gave more complex answers; in Reggio Emilia and many other Italian cities there are statues of lions at some church entrances.)**

  - You recognize a place by the air, by the smell.
  - You walk around a little to discover what's there. Or else you could look in the Internet and you know the address.
  - When you go to a place you have to be smart. Don't just say “How awful” right away.

Then another question: “Can you listen to a place?”

- **I listen to dream. (From a poetic child)**
- **You can listen to the future, too. You close your eyes and open your mind.**
- **When I am in the woods I hear the wolf. I see the eyes and the tails. But it's not real.**
- **I think about it and I imagine it.**
- **When I'm very quiet I can hear the angels. But there has to be silence around me, too. I have to be concentrating.**
- **Listening means that somebody listens to somebody else. That somebody wants to listen.**

Children entered the Center Malaguzzi, a large, empty space with big, big columns, and what do you think they did? Imagine yourself to be a child. They ran and ran. Then they were all asked to give their impressions of this experience. Teachers had videotaped the children, so they showed them the tape. The children talked about it and their words were recorded. One teacher, looking at the transcription of the children’s conversation, made notes about what could happen next and began to construct a project that respects the experience of children and of teachers as well.

More conversations and more transcripts followed. “Could you explain why you were always turning, running in a circle?” “It was a round place,” says Francesco. The teacher observed that children were influenced by the architecture in their movements. Then they showed the children photographs that they had taken and the children added comments. “I ran and ran up and down.” “I was running because I wanted to. And then I could not stop.” And then comments evolved about the way to run. “You sure did run a lot.” “Yes, but different. You can run in lots of different ways. You can run like this, in a kind of circle. You can make a tangle, like in a knot. You can do many, many things.” The teachers encouraged the children to prepare a catalog with drawings of ways of running: straight run, speedy run, a special tangled run, a very speedy run, a run with twists and turns.

Then the children began to construct what they remembered from the run with materials like clay and cardboard. They made maps of their running using geometrical shapes and words. “I’ve done zigzag running, jump running, long running and fast running because it gets you to the other side very quickly.” One child created symbols for each way of running, each one more complex. It was like a competition among the children to map their movements and make explicit the different ways of running. The teachers provided them with bigger cardboard columns so they could physically recreate this running experience, and used light projected on a wall so they could see their shadows moving while they were running. Slowly, the children had started to create a design for dancing—choreography. They then returned to the space to do a performance, and the video of this performance is in the exhibit.

How does all of this begin? When the children are very young in the Infant-Toddler Centers of Reggio Emilia they encounter materials and have teachers who listen and support these encounters. The hundred languages of children are present very early on in the lives of children, and teachers and parents are becoming more aware of their potential. Loris Malaguzzi always said that learning comes through relationships—with materials and with people.

John Seely Brown
continued from page 3

They all went to Montessori School. I could add one more, Bill Gates, but he didn’t go to Montessori School, he went to the Waldorf School, which is even more play-oriented than Montessori. Look what learning environments these 21st century heroes came from.

Why aren’t Maria Montessori and John Dewey still viewed as our heroes? In your field, they are, but if you go to the U. S. Department of Education, they are not. Montessori and Dewey were 75 years ahead of their time. Their methods didn’t scale, but their ideas do. And we have new ways to disseminate these ideas, including professional gatherings and social media. More importantly, we’re beginning to realize that our kids live in a learning ecosystem. We have tended to think of just schools, or just schools and museums or just schools and museums and libraries as sources of learning. In fact, everything around us is a source of learning. We’re beginning to look at how kids spend their day and how, among their interactions with each other and with mentors—not necessarily teachers—at home, online or in the more conditioned contexts of museums, learning constantly happens.

But how do we build a unified learning infrastructure? Can we build a badge system where you can get credit for what you’re learning all over the place, if credit really matters? (And in our society credit does matter.) There are some very interesting efforts led by the MacArthur Foundation’s Digital Media & Learning initiative that look at how to build an infrastructure that ties all the interaction-based learning environments together. And of course this type of trajectory through the learning ecosystem can be supported by social networks such as Twitter and YouTube.

The big picture here is the arc of life learning that honors both the child and the adult—and maybe the child inside the adult—and cultivates curiosity in all parts of everyone. This comes from a more blended epistemology that is not exactly new. It is the fundamental basis of Dewey, Montessori and other educational pioneers. How do you encourage man as knower, homo sapien, and man as maker, homo faber; to interact, make things and fully use the embodied mind? And in the digital world in which we now live, I want to extend this epistemology to not only how we make things/content, but to how we make contexts. We don’t...
think much about making contexts but the digital tool now makes this quite natural. In fact today’s kids are onto this as a new means of self-expression, seen most readily in how kids remix music, photos and videos. Why do kids love to remix? It is not a question of piracy. What they’re really doing is changing the context of that music. We now have the tools to not only to make things but to make contexts, which is pretty darn important. Because contexts give meaning to almost anything. Meaning comes when context and content interact.

Today’s learners—today’s creators—must be willing to constantly regrind their conceptual lenses to make sense of a constantly changing world. Often we are unaware of what our lenses are doing because they have become invisible to us, therefore regrinding these lenses is pretty tricky. But here is the surprising realization: when we come into the world we do not know how to make sense of anything. Through play we begin to build a frame of understanding of the world. Play is not just a fun thing to do. A root of our epistemology, play is the way we constantly interact with the world and see how it responds. Very young children making sense of the world through play are in fact grinding their first set of lenses. Now that we must regrind those lenses throughout our lives in an exponentially changing world, play becomes the root of almost everything we have to do.

That is a hard message to give to most CEOs. They think I’m kidding, but I’m not. Bringing play to front stage is the challenge we all have. Play has a very interesting history. We talked about homo sapiens and homo faber, but here’s another one: homo ludens or “playing man.” This is a highly nuanced concept of play. In a beautiful book of the same title, Homo Ludens (Playing Man), Dutch historian Johan Huizinga argued back in 1938 that play is the progenitor of culture and innovation. There are a couple of key aspects of play. First, in play we’re given permission to fail, fail, fail and then get it right. And second, in play we look for surprises. We also think about play as in the play of the imagination. Think about poetry, about how you play with a word phrase, tinkering with it to get it just right. And to me, most importantly, think about the play in terms of an epiphany: by playing with a riddle, suddenly the pieces fall together. If you can help construct an epiphany for a child or an adult, that epiphany is apt to be with them for life because it grows from a deep sense of interactivity.

Solving riddles through mindplay makes us reframe our thinking, and the ability to reframe thinking makes us able to embrace and master change as an adventure. We view our arc of life learning as an adventure. Here is a riddle: A black dog is sleeping in the middle of a black road that has no streetlights. There is no moon. A car comes down the road with its lights off and steers around the dog. How did the driver know the dog was there? The answer? Because it was daytime! This is a simple riddle, but it does everything to try to make you think it was night except to state it. Once you construct a different frame in order to make sense of it, it clicks.

Play stirs the imagination to help make the strange familiar, allowing us to thrive in a world of what-ifs. Consider Harry Potter and his profoundly strange wand that makes amazing things happen. When you read Harry Potter, you start to construct a world that makes things like the wand seem second nature. The reader begins with something strange, plays with it, imagines and creates a different world around it. Then within that new world what initially seemed strange is now commonplace.

Think about what happens when a child walks into a children’s museum. There are a lot of strange things there. But the interactivity builds a new world inside the child’s mind enabling the child to take strange phenomena and make them very familiar. There are a lot of relationships between the world-building that goes on in reading books like Harry Potter and what happens as you walk into a museum. Crafting a context in which the imagined wand now seems so familiar—world building, world construction—suggests that we’ve overlooked maybe the most important part of an epistemology that has to do with the homo ludens. How do the three philosophical concepts—homo sapiens, homo faber and homo ludens—come together as a blended epistemology? By tinkering, which never has gotten much respect, by playing with something, your mind rapidly circulates between knowledge-making hypotheses and play. In a sense, thinking, making and playing blend and work together to eventually make a person feel comfortable in picking up something new.

Tinkering can be much more than simply making a thing work. Tinkering, at root, develops a gut feeling for the system, knowing what can be pushed around, rearranged, refurbished, modified, etc. What you’re really doing is developing a familiarity with the material at hand. Through an embodied immersion one develops a deeply situated instinct.

How do we combine imagination, inspiration and intuition around a sense of awe, curiosity and humility? Think of the humility that happens from playing in children’s museums. Truth lies in the world and in our interaction with it, and that is a humbling notion. Where imaginations play, learning necessarily happens.
Reimagining Children's Museums: Leadership Preconference

Over the next three years, ACM will engage the field in reimagining children’s museums. In the process, an eclectic mix of creative thinkers will be examining learning and looking for ways to amplify it and make it scalable. What does a 21st century children’s museum look like? What experiences does it offer? What is our evolving role in our communities? How can we embrace change and enjoy making sense out of a constantly churning world?

The Reimagining Children’s Museums project launched with a Leadership Preconference prior to InterActivity 2012 in Portland, Oregon. Hosted at the World Forestry Center, this gathering brought together children’s museum leaders and thought leaders from the worlds of design, philanthropy, education and technology to talk about the future in their own domains and how this information might be extrapolated to the world of children’s museums. Content was organized around a recurring sequence of thought leader presentations, in-depth table discussions and reports to the entire group.

Speakers included: Carol Coletta, ArtPlace; Drew Davidson, Entertainment Technology Center, Carnegie Mellon University; Dale Dougherty, Maker Media and O’Reilly Media, Inc.; John Pluhowski, Corporate Communications, eBay Marketplaces, NA; Christine Tebben, Grantmakers for Education; and Charlie Trautmann, Sciencenter.

Each speaker posed questions to spark conversations. Carol Coletta offered three questions at the beginning of the day that remained in many people’s minds as they actively participated in this day-long charrette.

1. What would the pervasive—everywhere, all the time—children’s museum look like?

2. What challenge could children’s museums tackle with their constituencies—children—that would be celebrated on the front pages of newspapers across the country for making a real difference?

3. How can children’s museums make a demonstrable contribution to the vibrancy of their communities?

Complete proceedings from the preconference, documenting speaker presentations and participant responses, will be posted on the Reimagining Children’s Museums page on the ACM Web site.

Children’s Museums: Radical New Designs

Another element of the Reimagining initiative is the opportunity to engage design teams from outside the field to consider the space of a children’s museum in radically different ways. ACM hosted an international design competition to select design teams who will utilize the design process as a methodology to solicit and offer ideas for the next generation of children’s museums. The design teams will develop concepts that respond to the question of what it means to experience a children’s museum in the 21st century, and their work will showcase how design excellence promotes innovation and strengthens community building. Ideas and concepts from the following design teams will be exhibited at InterActivity 2013 in Pittsburgh.

• LEVENBETTS, New York City: David Leven and Stella Bettis with Pentagram (Michael Bierut, Partner); Robert Sillman Associates (Nat Oppenheimer, Principal); Jonsara Ruth, Designer/Artist; and Lisa Sigal, Artist.

• muf architecture / art, London: Liza Fior, Katherine Clarke, Mark Lemanski, Caitlin Elster, Alison Crawshaw with Objectif Graphic Design (Axel Feldman); and Richard Neville, Storyteller.

• Suisman Urban Design, Santa Monica, CA: Doug Suisman, Eli Garsilazo, Jack Hartley, Erick Rodriguez with Michael Vergason Landscape Architects (Michael Vergason and Beata Corcoran); Louise Sandhaus Design (Louise Sandhaus); and Richard Louv, Author.

• WANTED Landscape, Montreal: Paula Meijerink and Thierry Beaudoin with Sophie Malouin, Interactive Media Writer and Director; Sarah Watson, Museum Program Curator and Art Historian; and Atelier Big City (Howard Davies, Architect).

The conversation will continue during InterActivity 2013 (April 30–May 2) where on the first day, an off-site exploration of the conference theme, Reimagining Children’s Museums, will take place at Pittsburgh’s Byham Theater with a mix of speakers, videos and performances. Continuing through InterActivity 2014, ACM hopes this conversation will inspire, indeed propel, children’s museums to dramatically reimagine their roles for the future.
Children’s museum leaders agree on the need to reinvent old systems and reimagine how children’s museum can serve children and families in the 21st century. Before the Leadership Preconference, participants were asked, what does it mean to experience a 21st century children’s museum in the next ten or twenty years? Following are some of the more provocative responses:

**Sara Hashem, Founder and Director, Discoverama (Cairo, Egypt)**

Children’s museums have exhausted the idea of constructing great buildings filled with top-of-the-line interactive exhibits that we struggle to finance and maintain. Over the years we seem to have gotten caught in the “bigger is better” race, which has taken a toll on our operational budgets, sometimes to the extent of compromising sustainability. It might be time to take a different approach and envision a new children’s museum model. The future of children’s museums lies in downscaling museum buildings to smaller facilities that are replicable, sustainable and more accessible. Instead of operating in one mega location, children’s museums could offer their services in several smaller units around the city, as well as becoming more integrated within existing public spaces that cater to children and families, i.e. playgrounds, squares, gardens, etc. The idea is to create partnerships that would allow us to use existing infrastructures and enrich them with interactive learning experiences. In this way the children’s museum is transformed from an exclusive stand-alone space to an inclusive, collaborative public experience.

**Dianne Krizan, President, Minnesota Children’s Museum (St. Paul)**

Through technology, children’s museums of the future will also be connected globally in a network that fosters active idea-sharing and information-gathering. Even the children and families we serve can participate in these deeply networked connections. A children’s museum in the future should resound with scintillating innovation that transforms its host community. The entire field can become a dynamic nexus of wildly imaginative idea-generation, creative risk-taking and problem-solving, and a platform for profound social engagement around a communal task to reimagine the future and reflect our highest aspirations for the lives of children.

**Nancy Stice, Director of Exhibits and Facilities, Children’s Museum of Phoenix (Arizona)**

There are currently about 300 children’s museums large and small. Yet as more science, natural history, art and even history museums install children’s museum-like areas filled with early childhood staff, will more families experience playful, informal learning in these larger/different institutions? Could the trends in social media and the ability to become part of “created communities” lead to “cooperative children’s museums” in parents’/caregivers’ homes? One of the reasons visitors give for coming to a children’s museum is to provide a wide range of stimulating experiences for their children. The Internet now offers a vast array of commercially available “exhibits” from blocks, puzzles and art materials to circuit sets, physics kits and dress-up accessories. What if parents pooled their knowledge and collections of toys, kits and manipulatives to “stage” their own children’s museums periodically in their homes, much as families are already creating cooperative preschools? Even with all these new children’s museum mini-me’s, hopefully, the joy of discovery, the application of learning and the satisfaction of mastery that children’s museums foster won’t change. Evolution doesn’t work that fast. Children will still be children.

**Leigh-Anne Stradeski, Director, Eureka! The National Children’s Museum (Halifax, United Kingdom)**

The 21st century children’s museum should be a completely child-driven experience in terms of relevant themes, content, presentation and experience. This is critical if it is going to remain meaningful to children’s lives. While many of us consult with children in planning exhibit content and design, we are still very intrusive in how we shape and present the experiences. We identify topical themes we think are relevant for children’s development (or those indicative of societal problems requiring attention, i.e. obesity, intolerance), draw conclusions about how to address these issues and then create exhibits and programs. Could we flip this process and talk to children first in an open-ended way? Find out what their issues and concerns are—what’s important to them—and then design and build from there with their ongoing input? It would need to be a flexible, dynamic and easily altered environment, built with less capital investment than is currently required, in order to adapt to children’s changing needs and interests. It would rely less on a contrived, plastic experience and more on the integration of natural products and living things while at the same time including the newest technology which in now interwoven into children’s everyday lives—a seamless indoor/outdoor experience, with both natural and built environments as spaces for children to play and learn. More than anything it will be a place that children feel is their space.

**Cynthia Mark-Hummel, Director of Early Learning Research & Education, DuPage Children’s Museum (Naperville, Illinois)**

Over the next ten to twenty years, technology will be integrated into every facet of life; this will be perceived as progress. Children’s museums will be the last bastion of truly hands-on, socially interactive, physically challenging institutions of play. What was that word? Play. What’s play? Oh yeah, that stuff they do at the children’s museum. The innate process of child development will play out within the creative environments of children’s museums, where children can explore, challenge, use their senses to gather information, discover and assimilate new understandings by using their whole bodies, their minds and their imaginations in ways unfamiliar to schools, homes, neighborhoods and other public institutions. Children’s museums are where we go to play like our parents did—it’s fun and inspiring and we should have more places like this.
Outreach that Empowers

By Megan Dickerson

Last September, when it became clear that the economic downturn in the United States was getting worse, a team from Boston Children's Museum (BCM) in Massachusetts began the second year of GoKids in Boston Neighborhoods, a series of health-focused family nights at low-income public housing developments. Our idea was simple: if you build family learning opportunities on topics families choose, and if you attract them with the offer of a meal, they will be more likely to engage with the message (envisioning healthy lives) and the messenger (the museum as family resource).

We found ourselves, in a time of crisis, collaborating with the community that is often first affected by an economic downturn. This was no coincidence. GoKids in Boston Neighborhoods draws on BCM's legacy of community action. We wrote our project proposal to the Institute of Museum and Library Services as a joint effort with Boston Housing Authority staff and tenants. Each program, as discussed below, truly depends on participant ideas. Because we had built on our institutional assets and strategic mission to design a project that changes with participants' needs, BCM was ready to respond to the increasing needs of the community.

Empowered education

Each three-month GoKids program at a specific housing development is part of a larger BCM strategic imperative to build community, encourage family learning, and grow "Healthy Kids." During the first month, BCM staff meets with resident taskforces and support staff to learn about the community and discuss the content, timing, and recruitment strategies for five family nights that will happen at the housing development.

We begin the first family night with dinner and a performance of Balancing Act, a musical about healthy food, water, exercise, sleep, family time, and fun. The actors select audience volunteers to portray a motley crew of carrots and blueberries, tortillas and oatmeal, and tall drinks of water. The play succinctly demonstrates that GoKids will depend on families' input. We emphasize this by asking families what they would like to learn next week.

Back at BCM, we transform family ideas into hands-on activities in just one week. We work with the BNY Mellon CityACCESS Teen Ambassadors—six paid, multilingual youth—who help us develop culturally sensitive activities. We do not impose our own agendas on the activities, though each carries the basic learning objective of balancing food and physical activity. At one development, families asked for "stuff to do indoors," "salsa music," and "strength-building," so we returned with Couch Pillows Gone Wild: Build a Family Gym, in which families used water bottles for weightlifting and objects they found around the community center to create an obstacle course, all to a Latin beat. Over the next few weeks, we continue to create new programs in this way. Families become increasingly forthcoming with ideas as we prove that we will use them.

Families that attend three or more events earn a $125 museum membership. At the end of the five programs, we bus families for a meal and experience at BCM, and distribute museum memberships to qualifying participants. We also invite parents to become GoKids Parent Ambassadors, who receive a small stipend to lead several independent field trips to BCM. The next year, we return to the developments to repeat the three-month process for a second time. Throughout, we try to be as transparent as possible with participants, colleagues, and other interested parties.

Services without stigma

At one GoKids location, several families that did not live at the development saw BCM's banner outside the community center and started attending programs. Just like many GoKids participants, who tell us that they don't use food banks because they're "for poor people," it's unlikely that
create the change we see in GoKids participants, who tell us that their participatory membership has changed their lives. Family dinner is more fun. They drink more water. Even BCM staff members have made changes to healthier habits. After finding balance in a nonstigmatized space, we are willing and empowered to invest in our futures together.

By asking families what they want to give, not just what they want to receive, GoKids empowers them to participate in improving their own health and that of their communities. Even if BCM had a shorter history of community engagement, and even if times were golden, this approach would still find success in its embrace of flexibility and community input. As we respond to current crises and build for the future, we must balance power dynamics between the museum and the community, and reflect on our willingness to allow participants to lead. Finding the right balance will put us in the right place at the right time when the next crisis comes.

Megan Dickerson is manager of community programs and partnerships at Boston Children’s Museum, Massachusetts.

Families from Charlestown, a Boston neighborhood, gather for a meal at Boston Children’s Museum. Photo courtesy Boston Children’s Museum.

Families prepare to present a commercial for a favorite fruit or vegetable during the GoKids activity Family Veggie Theatre. GoKids staff created this activity in response to family requests for activities on nutrition, critical thinking skills, and dress-up. Photo courtesy Boston Children’s Museum.

GoKids in Boston Neighborhoods

**Inputs:**
- $150,000 two-year grant from the Institute of Museum and Library Services
- Four sites in four Boston neighborhoods: Mattapan, Charlestown, Roslindale, and South Boston
- Three full-time staff, including a Health and Fitness staff specialist, and six youth staff at 8–18 hours per week each
- Evaluation by Harvard School of Public Health

**Outcomes so far, averaged from four sites:**
- 50 percent of participants had never visited Boston Children’s Museum before the program, and 100 percent reported that participation has increased their interest in the museum.
- 80 percent reported learning something new and useful about health and fitness; open-ended responses have included everything from “learning to drink more water” to “I didn’t know how big a serving size was.”
- 100 percent reported having fun in the program.
- 70 percent earned memberships by attending three or more events.
- 75 percent of new members used their memberships to attend the museum on their own.
Children with disabilities and other special needs may have difficulty participating in play activities. Teachers can use a variety of modifications and adaptations to help the child take part in and learn from play. These modifications and adaptations will be most useful when the teacher observes that the child is interested in the ongoing activities but is unable to fully participate.

In the chart that follows, I and several colleagues identify eight categories of curriculum modifications that teachers can use in their classrooms. Creative teachers will think of many other modifications. The critical steps are to observe the child’s play and match the level of support to the child’s need.
## Play Modifications for Children with Disabilities

<table>
<thead>
<tr>
<th>Type of modification</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental support</td>
<td>The teacher alters the physical, social, and/or temporal environment.</td>
<td>For a child who may wander from center to center, make a photo display of the centers so the child can select from the photos to make an individual schedule of what she plans to do.</td>
</tr>
<tr>
<td>Materials adaptation</td>
<td>The teacher modifies the play materials so that the child can manipulate them.</td>
<td>For a child who does not have the strength to stand for long periods of time, make a simple tabletop easel to let the child sit in a chair while painting.</td>
</tr>
<tr>
<td>Simplifying the activity</td>
<td>The teacher simplifies a complicated activity by breaking it into smaller parts or reducing the number of steps.</td>
<td>For the child who is interested in table games but overwhelmed by the parts and pieces, describe the steps in clear, simple terms and draw the child pictures so she can follow the steps.</td>
</tr>
<tr>
<td>Using child preferences</td>
<td>The teacher uses the child’s preferred material, activity, or person to encourage the child to play.</td>
<td>For the child who loves trains and has not yet explored the dramatic play area, develop a train station theme for the area or train-motif placemats in the housekeeping area.</td>
</tr>
<tr>
<td>Special equipment</td>
<td>The teacher uses special or adaptive devices to allow the child’s access to and participation in the activity.</td>
<td>For the child who uses a wheelchair, which places him at a different height than the other children, ask the therapist about using a beanbag chair for floor-time activities.</td>
</tr>
<tr>
<td>Adult support</td>
<td>The teacher or another adult in the classroom joins the child’s play and encourages involvement through modeling and commenting.</td>
<td>For the enthusiastic child who is often on the verge of losing control, go to the play area and join the child’s play to slow down the pace and talk about the children’s play.</td>
</tr>
<tr>
<td>Peer support</td>
<td>The teacher uses peers and helps them join a child’s play to give encouragement through modeling and commenting.</td>
<td>For the child who has difficulty with activities that require several steps (such as making a collage or building a castle), pair the child with a buddy. The two can then take turns participating in the activity.</td>
</tr>
<tr>
<td>Invisible support</td>
<td>The teacher arranges naturally occurring events within an activity to increase the probability of the child’s success.</td>
<td>For the child who is not yet speaking or has difficulty making others understand, place photos or picture symbols in the play area so that the child can use them to increase peers’ understanding.</td>
</tr>
</tbody>
</table>

No.8 Inclusive Play

Introduction

'It is difficult for children to grow up emotionally stable if they are denied space and freedom to take and overcome risks, and if they are denied the opportunity to make friends with others of their own age’. (Lady Allen of Hurtwood, the founder of HAPA – now a part of the charity Kids)

Inclusive play is primarily about all children and young people having equal access to and equal participation in local play, childcare and leisure opportunities. And whilst this fact sheet focuses mainly on including disabled children in play, it is important to remember that the principles of inclusion apply to children of all abilities, ethnic backgrounds and ages. For brevity, when referring to children, this should be taken to include children and young people.

Inclusive play is not just about inclusion. ‘Equally important is the provision of high quality play opportunities to children regardless of their needs and abilities. While children won’t always be able to participate in all available activities, an inclusive project should offer all children a real choice of play activities.’ (Ludvigsen, Creegan and Mills 2005)

A widely accepted definition of play is that ‘play is freely chosen, personally directed, intrinsically motivated behaviour that actively engages the child’ (National Playing Fields Association, Children’s Play Council and Playlink 2000). Play is central to the physical and social development of all children. Through play children learn how to negotiate, take risks and overcome obstacles. Most importantly, it is through play that children develop friendships and a sense of belonging to a peer group. This is particularly important for disabled children as they are frequently marginalised and/or overprotected.

Lack of accessible play environments, as well as poverty, discriminating attitudes, the rise in traffic and parents’ increasing fear for their children’s safety, have all curtailed the child’s right to play and socialise freely. Disabled children are denied this right and freedom far more than their non-disabled peers. There is more control from the adult world in general - and a natural tendency for parents to want to protect their children from physical risk and negative attitudes. In addition, despite the move towards inclusion in education, many disabled children are still segregated into
special schools which take them away from their families and communities. This increases their sense of isolation and ability to make friends in their local areas.

It is estimated that there are some 770,000 disabled children living in the UK. (Prime Ministers Strategy Unit, 2005). 'Many barriers to play, leisure and making friends are put in the way of disabled children. Mainstream play and leisure are failing to meet the needs of disabled children, and as a result they are denied the activities that many of us take for granted. For young children, play is part of learning and development. For older disabled young people the availability of leisure activities is crucial’ (Langerman and Worrall, 2005). Research also shows that families with disabled children are more likely to live in poverty and experience social exclusion, and that this exclusion becomes all the more apparent as disabled young people grow up and want to take part in the same sort of activities as their non-disabled peers. Of particular importance are those activities which promote friendships and offer opportunities to take part in leisure activities (Murray, 2002) (Contact a Family, 2002).

1. The Right to Play

Every child is entitled to rest and play and to have the chance to join in a wide range of activities including cultural and artistic activities”. Article 31 of the UN Convention on the Rights of the Child

The right to play is a fundamental human right. All children - including disabled children - have the right to play and be a part of their local communities. Inclusion is now promoted by law and government policy, as outlined below.

i. The Disability Discrimination Act 1995 (DDA) sets out the basic legal duties in promoting equality for disabled people. Part 3 of the DDA requires service providers (including play settings) to make ‘reasonable adjustments’ to ‘policy, practice and procedures’ and, since October 2004, has included an obligation to make permanent, physical adjustments to allow access to indoor and outdoor ‘leisure centres, adventure playgrounds, play areas in parks and playgroups.’ The Special Educational Needs and Disabilities Act 2001 (SENDA) amended the DDA 1995, introducing new Part 4 which extended DDA duties to cover education and associated services including playtime, leisure activities and after school clubs runs on school premises.

Since April 2005 the revised Act (DDA 2005) has widened the definition of disability and imposed a new duty on all public bodies and local authorities to promote disability equality. Certain public bodies will be required to produce Disability Equality Schemes, which reflect local consultation and include three year action plans to improve equality of opportunity. This duty comes into force in December 2006. Practical guidance is available from the Disability Rights Commission.

ii The Children Act 1989 states that: ‘A primary aim should be to promote access for all children
and young people to the same range of services.’

iii. The Children Act 2004 provides the legal framework for the programme of reform ‘Every Child Matters’ (ECM) which sets out five outcomes which all services should work towards. These are: to be healthy, stay safe, enjoy and achieve, make a positive contribution and achieve economic well-being. Lobbying by the play sector ensured that recreation was included under the ‘enjoy and achieve’ outcome, and that play was integral to this. Achievement of these aims has to demonstrate improvement of services for all children and young people – including disabled children. For further guidance on how ECM relates to disabled children refer to the ECM website (Every Child Matters).

Each local authority now has to produce a Children and Young People’s Plan, and those wishing to access the Lottery play money will also need to draw up a play strategy. (Children’s Play Council, 2006) (Kids, 2006).

iv The Government’s Ten Year Childcare Strategy, Choice for Parents, the best start for children: a ten year strategy for childcare, also promotes inclusion in the wider context of children’s centres and extended schools: ‘It is particularly important that all children’s centres and extended schools provide services which are accessible to disabled children and their families. Therefore local authorities should ensure that all planning for children’s centres and extended schools includes measures to make these services fully inclusive.’(HM Government, 2004).

v. The National Service Framework for Children, Young People and Maternity Services (2004) set benchmarks for the well being and health of the nation’s children. Standard 8 (on disabled children) states that: ‘Disabled children and young people receive co-ordinated, high quality child and family centred services which are based on assessed needs, which promote social inclusion and, where possible, which enable them and their families to live ordinary lives.’ (Department of Health and Department for Education and Skills, 2004).

2. The barriers to play

Despite the range of legislation and guidance supporting the child’s right to play and to be included, disabled children still face many barriers, both social and environmental. Environmental barriers that exclude children with impairments, such as uneven surfaces and narrow gates, can easily be changed. Social barriers such as fear, embarrassment or discriminatory attitudes also need to be tackled so that an accessible play space is also an inclusive one in which disabled children and their families feel welcome’ (Dunn, Moore and Murray, 2003). Barriers might include some or all of the following:

Access: Physical access may present a barrier for children who use wheelchairs or who have mobility difficulties. Accessible transport is another barrier. Communication and language
barriers also prevent many disabled children from joining in. Research found that a ‘lack of appropriate support (such as transport, personal assistance and support to facilitate and/or interpret communication) was a key barrier for young disabled people wanting to access inclusive leisure’ (Contact a Family, 2002).

Information and outreach: Parents of disabled children may not know about particular projects, or information may not have been produced in accessible formats and minority languages. The Audit Commission found that ‘It is often a struggle for families to find out what is available, as information is fragmented’ (Audit Commission, 2003).

Funding: Better Play identified funding as a key barrier - particularly funding for additional transport and staff. ‘There is still a national shortage of both inclusive and specialist play and leisure provision with many initiatives subject to short term or insecure funding’ (Audit Commission, 2003).

Attitudes: Research demonstrates that attitudes are the biggest barrier to inclusion. The Kids Playwork Inclusion Project (PIP) found that staff may be wary about including disabled children due to a lack of experience and/or fear of the unknown. The attitudes of other children and the fears of parents can also be a barrier: ‘The main difficulty we encountered at the beginning of the project was parents and carers anxiety. We found that parents were concerned we wouldn’t be able to cope’ (Ludvigsen, Creegan and Mills 2005).

3. Overcoming Barriers

‘Inclusive provision is open and accessible to all, and takes positive steps in removing disabling barriers (both physical and social), so that disabled and non disabled children can participate.’ (Alison John, Disability Equality Trainer)

Those wishing to develop inclusive play need to have an understanding of the social model of disability. The above definition used by Kids, and adopted by Better Play, is rooted in the social model of disability which asserts that disabled children (and people) are disabled by the attitudes, actions and omissions of society in failing to include them in their natural environment: ‘impairment is what we have, disability is what we experience’ (John and Wheway, 2004).

Thus, for provision to be fully inclusive, it must identify the barriers to inclusion, look at what steps can be taken to overcome them, and ensure that the diverse needs of all children are considered. For play providers this means examining their policies, premises, staff and programme of activities, and ensuring that no one is excluded. An in depth knowledge of specific impairments is not essential to the development of good inclusive play provision – ‘the key requirement is a willingness to seek out and remove disabling barriers. Removing environmental barriers helps make play spaces accessible, whilst social barriers have to be dealt with to make
them inclusive’ (Dunn, Moore and Murray, 2003).

Most of the research on inclusive play supports this, demonstrating that inclusion works best when providers have a real commitment to inclusion. ‘Inclusion happens where people believe in it - where they really want it to happen. It becomes successful when people truly work together for everyone’s benefit’ (Douch, 2005). This sentiment is echoed in a report by Ofsted which asserts that the attitude of the provider is fundamental. ‘When the provider is positive, welcoming and displays a ‘can-do’ approach, barriers to inclusion can be overcome’ (Ofsted, 2005).

The Kids Playwork Inclusion Project (PIP) project further demonstrated that whilst attitudes are the biggest barrier – training is the key to overcoming these barriers. When staff training focuses on exploring attitudes to disability, inclusion becomes easier. Practically, many settings report that it is not so difficult to include disabled children once they develop a positive attitude and work in partnership with parents and colleagues. ‘In a recent follow-up survey of the impact of the PIP training on participants’ practice, every respondent reported that they had made changes to develop inclusion since taking part, with 65 per cent reporting increases in the number of disabled children attending.’ One participant commented: ‘We make mistakes, assess and evaluate and move on. It’s the willingness to try and learn that is important – but that comes after training’ (Kids, 2006).

4. Inclusion in practice

‘Inclusive play is not about meeting ‘special needs’; it’s about meeting all children’s and young people’s need to play, wherever they choose and in a variety of different ways’ (Douch, 2006)

A number of examples of good quality inclusive play have been developed around the country – both in the statutory and voluntary sectors, and there is a range of different approaches to developing inclusion. In some cases local authorities have taken the lead, by appointing inclusion officers to work with children, parents and providers to overcome barriers to the involvement of disabled children in play and leisure. In others, projects are being managed and run by the voluntary sector. Kids, for example, runs seven playgrounds, as well as promoting inclusive play through training and advice via the PIP project. It has also set up a Young People’s Inclusion Network to empower disabled young to participate fully in youth and leisure activities.

In some of the most successful examples of inclusive play, partnerships have been developed across a range of agencies and sectors. The Catalyst Project in St. Helen’s (a voluntary community based service that received funding from the Better Play Programme) attributes its success to good partnership working. ‘The service has developed excellent partnerships with St Helen’s Social Services, St Helen’s Play Section and the local sports centres who support the work by
providing workers with specific skills (Ludvigsen, 2005).

Bury Early Years and Childcare Development Partnership also maintains that ‘without working in partnership, and without the training and support, we would not have been able to offer such a wide range of play opportunities. The Play Inclusion Co-ordinator worked closely with other departments within the local authority to empower both the children and young people and their parents and carers to choose their community playschemes. The Children’s Information Service, Children’s Disability Team, Area Social Work Teams and Youth Teams all played a vital role in making this happen.’ (Douch, 2006). For further examples and case studies on inclusive play, refer to the publications in the list of references – in particular (Ludvigsen, Creegan and Mills 2005), (Contact a Family, 2002) and (Douch, 2006). Contact a Family, which works with families with disabled children, has also set up a database of local play and leisure groups.

According to research carried out to inform the development of the PIP project: ‘It is often assumed that where ‘best practice’ is identified there can be an expectation that ‘special’ insights are to be unearthed. However, the best practice we came across does the very opposite. It celebrates the ordinary, the unassuming and the modesty of settings and relationships which include disabled children – all children as routine and as a matter of working practice’ (Dunn, Moore and Murray 2003). In other words by looking at best practice in including disabled children, we simply identify the kind of good practices which should be informing our work with everyone.

The same research found that the key components for successful inclusion included careful planning, hard work and the provision of high quality and varied play opportunities. Other factors include the development of an inclusive play policy, a committed leader and a motivated team who believe in the rights of all children to access the service and be involved in the development of that service.

5. Action points for inclusion

Listed below are some action points for those new to inclusion. For more in depth guidance aimed at settings and local authorities, refer to the All of Us – Inclusion Checklist for Settings and the Kids Inclusion Framework for Local Authorities. (Kids, 2004a and b).

An inclusive ethos – underpinning values and principles

- Working inclusively with all children and all adults and developing respectful relationships is a key issue - as is working in partnership with staff, children and parents.

- Inclusion is something that has to be actively supported and promoted. It needs a clear vision, policies and procedures to support that vision, and a process (Kids, 2004a). Greenwich EYDCP adopted the following statement in their inclusion strategy: ‘Inclusion is an active process and
is more than adding a child to a setting; it requires adaptation on the part of that setting to truly include that child’s particular needs’.

- Use of language is important. The terms disabled children, and non-disabled children are preferred by the disability movement over ‘special needs’ or able bodied. The National Childminding Association has developed good guidance on this (National Childminding Association, 2005).

- Inclusion can only happen if it is undertaken in partnership with the full range of agencies, groups and individuals with an interest in inclusive play. These might include EYDCPs or children’s trusts, special schools, disability groups and national and voluntary organisations.

**Staffing**

- Good quality playwork practice is inclusive practice. Staff need to be recruited on the basis that they will actively include disabled children. They need have access to appropriate training. Kids offers a range of inclusive play courses for workers from entry level volunteers to managers of settings. Training in British Sign Language and/or Makaton may also be required

- Staff are required under Ofsted registration to be qualified and they need to have play qualifications: the National Occupational Standards for Playwork, developed by the play sector under SkillsActive, now cover inclusive practice.

- Staff are the most important resource in facilitating inclusion and time is needed to allow for regular discussions and de-briefings - inclusion is a work in progress. At Interplay, ‘it’s not just the children who are fully included – the staff are too. It has taken a while but now they’re not just seen as support workers for the children, they are part of the team. All of the staff have had disability awareness training and they feel confident about working with the children who attend the sessions.’ (Ward, Elliott and Day 2004).

- Whilst some disabled children will undoubtedly need extra support – it is not always necessary to have a ‘one to one worker’ – as this tends to reinforce the belief that the child is the problem. If an additional member of staff is required, that person may be better employed with a more generic role (Kids, 2004b).

- Evidence from the PIP project shows that inclusion can best be promoted where there are ‘People in place who have both an understanding of inclusion and experience with disabled children, who can act as bridges between potentially inclusive settings and segregated services or families with a disabled child.’ The ‘bridging role’ is one of the key elements identified in the Kids Inclusion Framework for Local Authorities, and is also the subject of a new briefing produced by Kids.

**Consultation and communication.**

- There is a need for a child centred approach and to find out
practical information about each child. How does s/he communicate? What are her/his likes and dislikes? How can games be adapted to ensure s/he can join in? Check with individual children (and their parents) what assistance they might require.

- Ask individual children for ideas of things they enjoy doing, and ensure proactive working at all levels to include and consult with children and young people. Fun4 Kidz runs five out of school centres on the outskirts of Liverpool, and excels in consulting with children. ‘Each club has a children’s group meeting each month where issues, concerns and ideas for activities are fed through to the board of Directors’ (Dunn, Moore and Murray 2003). ‘Making Connections’ (Murray, 2004) is a useful reference on methods of consultation with disabled children and young people.

**The play environment**

- Whilst a play environment cannot be designed or adapted to allow for every need or impairment but it needs to try and provide as much variety as possible - in terms of access, challenge and sensory stimulation. Adaptations to the environment, equipment and activities may be needed to enable full participation.

- Carry out an access audit, and check what is required under the DDA. Ensure that children can move around the play space freely, and that toilets are accessible. Check that play equipment is accessible to all children – both indoors and outdoors.

- Ensure that notices are clear and visible, and that signs are colour coded and in Braille. Different scents or pictures can be used to differentiate between areas of the play setting.

- Care must be taken to ensure that the play environment is safe. However, it is also important to remember that risk is an essential part of play. Disabled children in particular need an element of risk and challenge in their lives to enable them to develop and learn new skills. Guidance should also be provided on issues around intimate care, lifting, safety, risk and insurance. (Council for Disabled Children, 2004).

- Start with small, practical steps. Some things can be changed or improved immediately, other adaptations may need long term planning. Specialised equipment is not always necessary (John and Wheway, 2004).

**Activities**

- Disabled children and young people will, on the whole, enjoy the same kind of activities as their non-disabled peers. A range of choices should be made available with the aim of making much as possible available to everyone.

- Discuss with children and staff how best to include children in activities; not all children will be able to take part in all activities – be flexible and creative.

- As well as planned activities, there needs to be time for ‘free play’. Children should not be compelled to join in if they don’t want to. They should always be free to choose their activities.
‘Pick & Mix’ (Murray, 2004) is a useful guide on inclusive games and activities.

**Policy and funding**

- Inclusion must be embedded in local and national play strategies, as well as strategic partnerships. But inclusion also needs to be a specific standard in its own right within national standards and inspections frameworks for play, childcare and leisure (Ludvigsen, 2005).

- Funding for inclusion is usually focused on staffing, equipment, training and transport. However, it is not always necessary to seek funding for extra staff ‘to support disabled children’ but rather to enhance the experiences of all those attending. Evidence also shows that funding for training is a particularly effective way of changing attitudes and thereby promoting inclusion.

- Many providers worry that creating inclusive and accessible services will be too difficult and too expensive. Practical guidance on making reasonable adjustments and accessibility planning is given in ‘Implementing the Disability Discrimination Act in Schools and Early Years Settings’ (DfES, 2006).

- Many inclusive play and childcare projects have to rely on short term funding for what are effectively long term needs. The mainstreaming of funding would show both providers and parents that inclusive provision is a right – as required by the DDA and outlined in the 10 Year Childcare Strategy.

**Conclusion**

“I go to the club where I can play basketball but I use it more as a chance to see my mates and talk to the other young people that go. I’ve made lots of friends and the club has given me the chance to try load of new thing and do the stuff I like doing” (young person) (Ward, Elliott and Day 2004).

“Because the club’s local, Joe knows some of the local kids now so he can go out and play with them” (parent) (Ward, Elliott and Day 2004).

“Although we still have a lot of hard work to do, I am proud to say that we have now successfully included lots of disabled children in our clubs” (Play Setting Manager) (Ofsted, 2005).

There are wide-ranging benefits to developing inclusive play services – both for the children and families who use the services, as well as for the staff, the settings and the wider community. ‘Enabling all children to play, and to play together, is about a benefit to the whole community. It is not about overcoming legal hurdles or making expensive provision for a small section of the community. If any child is prevented from playing then it diminishes the play experience of all’ (John and Wheway, 2004).

The inclusion of disabled children should be placed at the heart of all playwork and childcare developments. ‘We need inclusion to become a key element in practice, in policy, in strategy, in quality assurance, in training and in funding’ (Kids, 2005). But
inclusive play must also be seen in the wider context of including disabled children in society as a whole – in education, sports, leisure, culture, families and communities. This is essential if disabled children are to participate fully in ordinary everyday life, play and learn alongside their peers and develop into healthy well balanced adults. It is up to all of us to ensure that this right becomes a reality.

References and resources


Every Child Matters – information on how ECM relates to disabled children and to download the following documents:
- Improving the life chances of disabled children
- National Service Framework for Children
- Ten Year Strategy for Childcare

www.everychildmatters.gov.uk


**Written by Rachel Scott (Kids) July 2006**

Many of the key messages in this factsheet are drawn from the findings of the KIDS Playwork Inclusion Project (PIP), as well as from the evaluation of Better Play (Round 3) which focused on inclusive play. The PIP project was set up in 2001, with funding from the DfES, to increase the number of disabled children in play and childcare settings through training, regional development, advice and support. Better Play (a partnership between Barnardo’s and the Children’s Play Council) was a grant programme funded by the Big Lottery Fund. KIDS was also involved in the management group of Better Play, and was subsequently funded to set up the Better Play Inclusion Network to provide ongoing support to those groups which received Better Play Funding.
The Children's Play Information Service produces factsheets and student reading lists on a variety of play topics, and can also provide customised reading lists in response to individual requests.

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