



beating good foods getting plenty of exercise reducing screen time connecting with the outdoors









healthy museums

A collection of best practices among museums that highlight the four key messages of the Good to Grow!® initiative:



Mary Maher Editor

ASSOCIATION OF CHILDREN'S MUSEUMS Arlington, Virginia Healthy Kids, Healthy Museums

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The Association of Children's Museums (ACM) is pleased to present *Healthy Kids, Healthy Museums*, a publication profiling best practices at children's museums that offer family-friendly strategies to combat the childhood obesity epidemic. The publication is a resource to give children's museum professionals ideas and tips for implementing successful models to support healthy families. The articles included in the publication show the range of innovative health-related programs, exhibits, initiatives and other practices at children's museums across the United States, as well as in the United Kingdom.

Healthy Kids, Healthy Museums is one component of ACM's Growing Healthy Museums project, funded through a grant from the U.S. Institute of Museum and Library Services. The project seeks to increase children's museums' institutional capacity, knowledge and skills to become leaders in promoting health and wellness in their communities. Growing Healthy Museums is a signature project of Good to Grow![®], ACM's national initiative to improve the health and wellness of our nation's families through museum programs, exhibits, partnerships and institutional practices.

Serving more than thirty million visitors a year, children's museums have enormous potential to reach children and parents with healthy messages. Good to Grow![®] highlights the following key messages:

- Eating healthy foods in the right amounts;
- · Increasing physical activity;
- Reducing screen time (including computer and TV); and
- · Connecting with nature through outdoor play.

The articles appearing in *Healthy Kids, Healthy Museums* were selected from among forty-two proposals submitted to ACM in Spring 2008. They represent museums with small to large budgets, in urban and suburban locations. The practices profiled took place at the museums between 2008 and 2009. Some are still ongoing; others have ended or evolved. Each practice addresses one or more of the four Good to Grow![®] messages. The organizing principle that emerged from the submissions was the different ways that children's museums take a stand on an issue and make an impact on their communities—from developing exhibits, programs or events, to making an institution-wide commitment to an issue affecting the lives of visitors or staff.

I would like to acknowledge all those who contributed to *Healthy Kids, Healthy Museums:* the writers representing thirty different museums, editor Mary Maher, the members of the Growing Healthy Museums Working Group and the ACM staff team. Their work has led to the creation of a publication that we hope will seed healthy practices at more museums and in more communities around the globe.

Janet Rice Elman Executive Director Association of Children's Museums



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exhibit development Museum exhibits that grow healthy habits among children and families

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Kid Power

Boston Children's Museum Boston, Massachusetts

Emily Kuross, Health and Fitness Program Educator

se your power! Usa tu energia!" exclaims a friendly recording as six-year-old Amanda pulls herself up in a pulley seat by using her own arm strength. Nearby, two brothers race to illuminate lights by pedaling stationary hand-bikes. Upstairs, a crowd of adults and children play a game on a light-up dance floor. The space hums with the energy of activity and enthusiasm. Welcome to *Kid Power*, Boston Children's Museum's (BCM) permanent health and fitness exhibit, designed to inspire children and their families to lead healthier, more active lives.

Kid Power is a lively exhibit full of a variety of activities that encourage adults and children to play actively together and to try to use their bodies in both familiar and new ways. The exhibit's central message is the basic nutritional concept of energy balance: power in, power out. The amount of fuel you put into your body (calories from food) needs to be balanced by the amount of energy you put out (calories burned in physical activity). In addition, secondary *Kid Power* messages aim to empower people to make good choices and to feel good about themselves.

Through *Kid Power's* "power out" stations, adults and children engage in physical activity together. These stations include: handpedaled bicycles, a tennis ball launcher, pulley seats, a gym with basket ball hoops, a light-up dance floor and a climbing wall. "Power in" stations provide simple, concrete nutrition information through hands-on activities, such as balancing discs representing food choices and physical activities on a seesaw, describing a "super food" (foods extra rich in nutrients, like blueberries or spinach) for a partner to guess, getting a drink of water at a bubbling fountain or rating a breakfast put together with pictures of foods that are "green light,"

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REPLICATION TIPS

The 3,000-square-foot *Kid Power* exhibit took two years and \$800,000 to build. On any scale, however, several ideas key in creating *Kid Power* could provide useful guidance to other museums hoping to develop health-focused exhibits. The core ideas, which can form the basis for replication, are 1) don't reinvent the wheel, 2) health is a family issue and 3) constantly consider the diversity of your audience.



Kids hop around a light-up dance floor in Kid Power.

DON'T REINVENT THE WHEEL Talk to people in the local public health field

to benefit from their knowledge.

Before developing Kid Power, BCM invited public health experts from Boston-area institutions, including Harvard, Tufts and the Boston Public Health Commission, to a Go Kids! Summit with the purpose of defining which health subjects would make most sense for a children's museum to tackle. Overwhelmingly, the conference participants felt that the most important focus should be childhood obesity because of its recent epidemic proportions. They thought that an exhibit would be the best way to start because it would create a permanent space in the museum dedicated to the subject and would provide a platform from which to develop and refine future health-related messages. As a result of this early collaboration, BCM received enthusiastic support for the exhibit from the local public health field because of its alignment with their needs and interests. Other organizations already had health and fitness programs for older children, but local healthcare providers thought that BCM could best communicate with younger children. One of these organizations, Blue Cross Blue Shield of Massachusetts (BCBS), provided funding for the exhibit.

Before beginning the design process, BCM gathered a board of advisors composed of a smaller group of experts from the GoKids! Summit and representatives from the two public health organizations funding the exhibit. The end product, *Kid Power*, is an example of a body of work fully shared between the museum and its public health partners.

Health experts told museum staff that current research shows that energy balance is the key to maintaining a healthy weight. This became the most important concept to convey to visitors in the exhibit. Protoyping and building the exhibit components were done in collaboration with the Hands-On design company. As BCM and Hands-On developed the physical exhibit components, discussions with the advisory board continued. For example, after seeing a preliminary design, advisors told BCM exhibit development staff that research also shows that encouraging self-assessment can be an effective way to motivate people to be active. Therefore, BCM added color-coded rings to many of the physical activity "power out stations" to allow visitors to evaluate themselves. The rings let visitors see their accomplishments such as how high they launched a ball, how much energy they generated pedaling the hand-pedaled bikes or how far they climbed on the climbing wall.

HEALTH IS A FAMILY ISSUE Think about how to promote a dialogue between adults and children.

In order to create an exhibit that would keep both children and their adults engaged, the advisory board provided focus group information about what families already know about health and fitness. Most people already know many of the steps they can take to live healthier lives; however, they don't change their behaviors because of various barriers. Focus groups showed that the number one barrier families expressed was lack of time. When they do have time to spend together, rather than individual family members taking the time to exercise, busy families want family time together. (Parents also

worried that their children wouldn't enjoy certain physical activities and would rather do other things.) So, BCM tried to focus on ways to help families think about being active while spending time together. It was also important to give parents the opportunity to observe their children enjoying being active. Kid Power's exhibit components are built to allow two or more people to participate at the same time, rather than one person playing alone, in an effort to encourage interaction and conversation among adults and children.

The balance between providing a unique, museum-style experience and providing activities familiar enough that families would realize that they could extend these experiences to their daily lives was key to exhibit success. To this end, many of the activities in Kid Power are familiar physical activities, with a twist: hand-pedaled bikes instead of regular bikes or basketball hoops with wacky backboards, for example.

CONSIDER AUDIENCE DIVERSITY Make it meaningful and accessible for families of all backgrounds and abilities.

In designing *Kid Power*, BCM purposefully avoided focusing on sports heroes or even competitive sports. Though high-profile sports on both amateur and professional levels are popular, not all children in BCM's diverse audience feel successful in competitions. Instead, *Kid Power* conveys the message that no matter who you are, there is a way for you to enjoy physical activity. The "power out" stations encourage a variety of different types of body movement, and many are accessible for visitors with disabilities.

Exhibit signs also communicate that "powerful bodies come in all shapes and sizes," and images show the wide variety of "average" people. On a ramp leading out of the exhibit are photos and short stories from families about how they make healthy activity and food choices. These are real families—two-parent, single-parent and multigenerational—from several of Boston's major cultural groups. *Kid Power* signage is bilingual: Spanish and English. Additionally,



Kid Power gives adults and children the opportunity to engage in physical activity together through "power out" stations, such as Pump It Up, where kids use their own power to see how high they can launch a ball.

Most people already know many of the steps they can take to live more healthfully; however, they don't change their behaviors because of various barriers. Focus groups showed that the number one barrier families expressed was lack of time. When they do have time to spend together, rather than individual family members taking time to exercise, busy families wanted family time together. (Parents also worried that their children wouldn't enjoy certain physical activities and would rather do other things.) So, BCM tried to focus on ways to help families think about being active while spending time together. the images of foods used at the "power-in stations" include traditional foods from Hispanic, Caribbean, Chinese and Japanese diets along with some American standards.

What We Learned through Evaluation

One year after Kid Power's installation, a Wheelock College professor and her students completed an evaluation of the exhibit for the museum. The evaluators used observations, interviews and surveys with nearly 500 visitors. They found that, overwhelmingly, visitors of all ages enjoyed the exhibit and had meaningful interactions there. Nearly all visitors stated that they would be interested in returning to the exhibit.

The majority of adults found it easy to interact with their children in *Kid Power*, engaging in play, modeling activities and reading information to them. More than half of the adults believed their child learned something related to physical activity in the exhibit; just under half of the children reported that they learned about being physically active. A majority of both adults and children expressed an intention to apply the Kid Power messages to their daily lives. However, fewer than 10 percent of visitors took away any message related to nutrition and healthy eating, most likely because visitors spent much less time and had fewer interactions at the "power in" stations than at "power out" stations. Interviews revealed that both adult and child visitors also found the use of the word "power" confusing, indicating that another word, such as "energy,' might have been a better choice.

Kid Power Messages Resonate Beyond the Exhibit

BCM hopes to augment the nutrition message of the exhibit with museum programs. In fact, one of the most exciting outcomes of *Kid Power* is that the exhibit has spilled over its borders and has influenced programming and even museum culture. Before the opening of *Kid Power*, BCM created a full-time position for a health and

fitness program educator with the goal of creating and coordinating programs that extend the Kid Power messages. The museum now has weekly programs focused on nutrition or physical activity, with varied activities such as edible art for toddlers, taste testing or cooking workshops with seasonal produce, themed yoga, games from different cultures, making sports equipment from recycled paper and more. The museum holds annual festivals celebrating health, including: a Fitness Festival, a Food For Thought nutrition festival, Children and Healthcare Day with visits from local healthcare workers, World Asthma Day, a Boston Marathon celebration and Summer Safety Day. Other museum educators now make an effort to include a nutrition or physical activity component in all cultural, art and science festivals. With its partner, City Stage Company, BCM also created a participatory theater show called "Balancing Act, the Musical" for the museum's theater. Through catchy songs and colorful costumes, the show teaches the audience to get more water, fruits and veggies, whole grains, exercise, family time and sleep.

Kid Power has served as the backdrop for a new kindergarten school program, which gets kindergarten classes moving and thinking about how they can be powerful by using all the different parts of their bodies (including dancing the Hokey Pokey). *Kid Power* also inspired BCM to use a health and fitness theme for its partnership with Action



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for Boston Community Development Head Start for 2007-2008. Head Start families came to the museum for free family nights that included a healthy supper, facilitated visits of *Kid Power* and take-home activities. In addition, museum staff asked the Head Start teachers to use the *Kid Power* messages and brainstorm ways to extend that museum experience in their classrooms. Evaluations showed that both the kindergarten and Head Start museum programs were positively received by the teachers and students.

With the exhibit as inspiration and the content knowledge of the health and fitness educator, BCM has started to bring health and fitness programming into the Boston community as well. The museum received a grant from the Institute of Museum and Library Services that has allowed its outreach team to spend ten-week periods in four Boston housing developments, providing free museum-style health and fitness programs to families living there. These programs included activities such as: Snack Iron Chef, Music and Movement, Build a Super

Hero Breakfast with "Super Foods," Burn the Energy in an M&M with Jumping Jacks, Design an Obstacle Course with Found Objects, Water Bottle Weight Lifting, Make a Fruit and Veggie Rainbow Plate and a Dance-Off. BCM later brought families who participated in at least three program days for a free museum visit to *Kid Power*.

Finally, simply the presence of the exhibit has led staff members to think more frequently about their own physical activity and eating habits. Healthier food options have begun to appear at meetings and social events. More staff members have begun biking to work, going for walks during lunch or simply taking the stairs. Several staff members have committed to regularly including as many "super foods" as possible in their weekly diets. BCM staff have realized that the messages of *Kid Power* are a resource and are applying them to their own lives.

Overall, *Kid Power* is a very successful and popular exhibit. Though it cannot teach museum visitors all the complexities of nutrition and physical fitness, it does get them thinking about these issues. It engages children and adults in healthy activities during their visit, and most importantly, they have fun while doing so.

Smart Moves with Food and Fitness

Children's Museum of Tacoma Tacoma, Washington

Courtenay Chamberlin, Communications Consultant

very grown-up who nurtures young children has the power to help them develop healthy habits. By taking small steps, like walking together one night after dinner, choosing water over soda or planning a healthy meal together, adults can initiate routines that result in big changes over a child's lifetime.

In the spring of 2007, the Children's Museum of Tacoma (CMT) opened *Smart Moves with Food and Fitness*, an exhibit that offers children and adults playful, hands-on opportunities to learn about incorporating healthy approaches to eating and fitness into their daily lives. *Smart Moves* is one of the museum's *Learning Lounge* exhibits, created to help adults explore important child development topics, such as healthy eating, emotion coaching and financial literacy, with their child as they play together.

Learning Lounge exhibits are centered around learning stations, or kiosks, that are designed to travel. Since the first *Learning Lounge* was created in 2000, the kiosks have become more interactive and visually stimulating, moving from classic museum-based panels with images and text to cutout shapes that convey a sense of playfulness as they deliver messages through play-based strategies, such as games and role playing.

The Children's Museum of Tacoma's 4,000-square-foot environment features exhibits that complement home and school experiences for young children ages one to eight. *Learning Lounge* exhibits, such as *Smart Moves*, are typically installed in a small gallery in the museum. Compact enough to travel, these same kiosks can function well outside the museum as core exhibit components. Requiring at least a 300-square-foot space, they fit nicely into other small children's museums, health clinics or YMCAs.

Due to the current importance of the topic, however, *Smart Moves* was expanded from a single *Learning Lounge* kiosk to an exhibit covering more than 1,000 square feet in the museum's largest gallery. It occupies more than one-quarter of the museum's total space.

Smart Moves is divided into three core concept activity areas: eating/drinking, moving and thinking. Each core concept is the focus of an activity station: a two- or three-sided kiosk, roughly six feet tall, with activity tables, interactive games and other manipulatives on the lower half and signage targeted to adults on the upper portion. The Eating/Drinking kiosk explores healthy options in selecting foods and beverages, the Moving kiosk suggests physical activities and the Thinking kiosk considers the role of planning to successfully incorporate healthy habits in daily routines.

Because they are designed to travel to a variety of locations, each kiosk can stand alone and is compact with few loose parts. But, in the museum, this small kiosk exhibit serves as the center around which an environment was built inexpensively to actively bring each core concept to life. For example, in the museum, the Moving kiosk is surrounded by a kids' yoga studio, a roller racer path and climbing wall.



One of three Smart Moves with Food and Fitness exhibit kiosks, this example focuses on activities and information about healthy eating.

Playful Learning for Children and Adults

Play is essential for developing children's cognitive skills, their gross and fine motor skills and their emotional and social growth. These building blocks of learning are at the heart of all CMT exhibits. The result: exhibits that combine active pursuits, such as gardening, with cognitive pursuits, such as tallying harvest yields, with social pursuits like working with other children to run a deli. *Smart Moves* features menu planning (cognitive activity), building meal portions with blocks (physical activity) and playing games together (social/emotional activity).

These developmental learning concepts translate directly to the lifelong learning of the museum's bigger visitors, too—adults. *Learning Lounge* exhibits offer adults the opportunity to learn new information (cognitive), play and interact with their child (physical and emotional). Debbie Kray, director of education, comments, "We realize that adults have little time to look over resources when visiting the museum, so *Learning Lounges* were created to provide easily accessible and digestible information for adults to consider and

The kiosk is flexible. It can live in the museum, flanked by additional components, or it can hit the road and travel to community partner locations where we have the opportunity to reach even more kids—and the people who support their development with health messages. then reinforce as they play with their child in content-related exhibits." As a *Learning Lounge* exhibit, *Smart Moves* is neither an exhibit created just for kids nor a resource area just for adults. It's a hybrid and promotes learning through play for both adults and children through specific activities.

Why a Health Exhibit in a Children's Museum?

According to a 2006 American Academy of Pediatrics report, "Research has shown the importance of social, physical and cultural environments in determining the extent to which people are able to be active in all facets of daily life, including work, education, family life and leisure. These communities require a collaborative framework between families, schools, community recreation leaders and health care professionals." As a resource for parents, educators, caregivers and children, the museum responded by creating a traveling exhibit, an expanded museum environment and programs through which children and adults can learn how small changes-smart moves-each day can improve health. As community-based institutions, children's museums are in a unique position to foster collaborations and affect family-wide changes.



To expand on the core concept of *Smart Moves* Moving kiosk, the museum built a climbing wall, much loved by active young visitors.

Existing community resources offered health-message programs for older elementary children and teens plus books for parents striving to nourish their toddlers, but a large gap in information emerged for children three to eight years old. *Smart Moves* filled that void, offering fun, interactive ways for adults and children to learn about small changes they can make together to improve their family's overall health.

Smart Moves shares important health-related information with children and adults in order to combat the increase in childhood obesity, to counteract the significant reduction in active play time and to make up for the lack of engaging local resources for parents and caregivers on health-related issues. According to the Pierce County (the county in which Tacoma is located) Health Department, obesity rates doubled in the last decade: 26 percent of adults were classified as obese (higher than the state's average of 23.2 percent) and 36 percent were overweight. In the past two years alone, obesity rates rose 63 percent in Pierce County. These alarming statistics point to a need for information on healthy living options in the community. Existing community resources offered health-message programs for older elementary children and teens plus books for parents striving to nourish their toddlers, but a large gap in information emerged for children ages three to eight years. Smart Moves filled that void, offering fun, interactive ways for adults and children to learn about small changes they can make together to improve their family's overall health.

Any children's museum can replicate *Smart Moves* by scanning its local community, identifying gaps in resources and partnering with local organizations to design messages that fill a void in current health information. The museum's four-stage process that guided the development of this exhibit included concept, design, production and exhibit run.

CONCEPT STAGE

A Smart Moves advisory committee was created and included community partners from the local health department, school districts, YMCA, park district, children's hospital, healthcare providers, members and prospective users. The museum also involved online partners We Can!, a National Institutes of Health program designed for families and communities to help children maintain a healthy weight, and Small Steps, a Department of Health and Human Services Web site that offers stories. newsletters, tips and recipes geared toward helping people manage their weight and body image. Advisory committee members were selected for a number of reasons, including: expertise in the field, previous partnerships with the museum; current work with target

audiences or had previously expressed interest in helping with a health-related exhibit.

Committee members were recruited by staff or referred by one another. Many were passionate about encouraging family meals and providing detailed nutritional information about food choices. As a result, messages about eating together, proportions and smart food choices were incorporated into the Eating/Drinking kiosk. Tempered by staff's experience working with its audience and to make the traveling exhibit playful and approachable, these messages were simplified to encourage subtle, small lifestyle changes, such as drinking water rather than soda or taking a walk rather than watching television. Some advisory members wanted to include details about the food pyramid or caloric intake, so the *Smart Moves* Thinking kiosk provides recipes and refers visitors to other nutrition and exercise resources.

The museum worked with exhibit designers to narrow the exhibit's goals and messages to keep them consistent, to keep the project on track throughout its creation and to guide other museum departments, such as development and marketing, in both funding and promoting the exhibit.

Exhibit Messages:

1. You can choose what, when and how you and your family eat, drink and exercise.

2. You need to make healthy eating, drinking and exercise choices.

3. It's fun to make these choices together.

Exhibit Goals:

1. Identify healthy eating and physical activity habits.

2. Emphasize the roles of the adult and child in eating and physical activity habits.

3. Highlight the importance of planning, preparing and eating meals as a family.

4. Accentuate the necessity of planning and taking part in physical activities as a family.

DESIGN STAGE

Before fabrication began, a content and exhibit package was presented for advisory committee review that included researching and refining core concepts, pre-testing ideas and developing the visual look of the exhibit pieces.

The *Smart Moves* design has the feel of an urban, cityscape environment that mirrors components of the museum's permanent exhibits, such as *New Digs*, an urban garden. It invites pretend play. Billboards and signs share important messages. Stoplights, adapted from the national We Can! program, encourage "smart moves" and "go, slow, whoa" messages on food, drink and exercise.

The kiosks feature original artwork by Lizzy Rockwell from her books *Good Enough to Eat* and *The Busy Body Book*. Using preexisting illustrations saved time and expense and also steered families toward reading the books inside the exhibit. Rockwell's books can also be borrowed from local libraries or purchased from bookstores to be read later at home.

Smart Moves' three kiosks eventually focused on three core concepts and related activities:

• Eating/Drinking kiosk: helps identify healthy foods, eating habits, mealtime rituals and the importance of drinking water.

• Moving kiosk: showcases the importance of a balance between energy intake and energy expenditure; shares fun ideas for traditional and non-traditional forms of exercise.

• Thinking kiosk: offers practical tips for families to encourage planning and smart thinking about the foods and drinks.

PRODUCTION STAGE

Before fabrication, the museum prototypes materials with focus groups and creates exhibit text and images for additional review. Feedback resulted in some design and content changes before the kiosk design was approved for fabrication. Installation of the completed kiosks in the museum took just hours, but preparing the museum for the expanded surrounding exhibit environment took nearly a month. Partition walls were built, climbing walls were installed and kitchen components were gathered. Finally, the exhibit space was brought to life through extensive use of murals.

EXHIBIT RUN STAGE

While the exhibit is up and running, the museum conducts assessments and modifications. *Smart Moves* was evaluated through staff, board and visitor surveys as well as recorded informal observations. The exhibit was also evaluated for accessibility by the former Center for Creative Play. As a result of these evaluations, the museum made enhancements that ranged from simply adding stepping stools to labeling food bins in the kitchen to encourage clean-up and help kids practice categorizing foods by group. Conversation-starter cards at the kitchen table proved so popular with kids and adults that the museum made them into a take-home piece. To expand the *Smart Moves* kiosk's core concepts even further, the museum created areas for dramatic and explorative play to model healthy eating and activity choices.

• Eating/Drinking Area: demonstrates little things visitors can do at home using a healthy pretend play kitchen, a dining room table for meals and conversation and living room games for physical activity indoors.

• Moving Area: suggests a variety of exercises for cardio, strength and flexibility through its kids' yoga workout studio, roller racer path and climbing wall.

• Thinking Area: offers comfortable seating and a library of books, recipe cards and make-and-take projects to continue the learning and fun at home.

An exhibit-related afternoon drop-in program, Smart Moves and Grooves, highlights healthy eating and fitness habits and is free with admission, which is reduced during afterschool hours to increase accessibility. Through facilitated games and activities, spotlighting the learning points in the exhibit, the program guides visitors toward healthier lifestyle choices through stories, games and crafts. A local yoga studio leads a monthly kids' yoga class at the museum.

Feedback and Response

The biggest challenge in creating the exhibit was finding the best way to connect with the audience. Smart Moves recommends behavioral changes. Previous Learning Lounge exhibits also had suggested behavioral changes, but the museum had never dedicated this much space to any one concept. In most museum exhibits, learning is open-ended: one child stacks boxes to create a castle, another child creates a train. Smart Moves structured the play to a greater degree in order to point visitors toward key concepts and outcomes. For example, a puzzle activity illustrated portion size for each food group at daily meals. This shift in staff thinking and visitor participation was met with mixed results. Many advisors, especially ones from the health department, were excited about the museum sharing explicit health messages. From their point of view, the more places people hear them-and in this case actually act on them-the more likely they are to implement changes. While the majority of visitors enjoyed the mix of activities and physical opportunities, some wanted less behavioral change messages.

Yet, rewards from directive messaging were recognized. A survey response to an activity that matched food choices to "go, slow, whoa" messages using the movement of beads along wire paths, elicited this comment: "Because my son likes playing with the beads it gives me a chance to talk about the food choices, as well as [help him] learn stop and go." After the exhibit opened, even office staff have been heard to say, "I brought a *Smart Moves* treat for today's meeting," or "That donut for breakfast wasn't such a 'smart move.' I'll need to have salad for lunch."

Developing *Smart Moves* supplies the Tacoma community with engaging activities to help children and adults learn about healthy eating and physical activity together. It is one step that a small museum can make toward combatting childhood obesity and the significant reduction in active play time. The exhibit also responds to the lack of accessible local resources for parents and caregivers on health-related issues. The kiosk is flexible. It can live in the museum, flanked by additional components, or it can hit the road and travel to community partner locations to reach even more kids—and the people who support their development—with health messages.

Health House

The Children's Museum of Indianapolis Indianapolis, Indiana

Jenny Burch, Associate Vice President of Development

n March 2007, The Children's Museum of Indianapolis opened a new permanent exhibit, *Health House*. Nestled inside *ScienceWorks*, the most popular science exhibit in the museum, *Health House* is the first exhibit to focus on the science of human health since *ScienceWorks* opened more than a decade ago. *Health House* focuses on ways that families learn about health, fitness and nutrition *together*, rooted in the belief that informal discussions and discoveries are more likely to extend beyond the museum visit if the entire family participates.

Health House visitors, drawn in by a bright, colorful facade that looks like a modern American home, are greeted by a friendly grandfather clock who reminds them to make healthy choices (play, choose healthy snacks, brush your teeth and sleep) at the appropriate times throughout the day. Visitors move into the family room to sit on the big red couch and watch TV, but "Coach Potato," a character seated on the couch, suggests that they get up and get active. The episode on TV isn't passive either. It shows visitors how to play active games with their family members right in this typical living room.

After working up an appetite playing in the family room, visitors spot the brightly colored kitchen with a large dining table in its center. Pretend food from five food groups allows visitors to "color their plate" with meats, dairy products, breads, fruits and vegetables. A see-through can of soda shows visitors how much sugar is inside. (A lot!) A full-size refrigerator swings open to "talk" to visitors about healthy food choices.

Next stop: the *Health House* bathroom where visitors cast a black light to reveal the "germs" on the countertop, pretend to wash their hands and then brush the teeth of a dinosaur named "Teeth Rex" with a giant toothbrush. Nearby is the bedroom where "Sleepy Bear" sends a message that a good night's sleep helps children grow strong, stay well and do their best.

As visitors exit across a front porch, they see hula hoops, hopscotch and other outdoor games. With plenty of safe space to play

The museum considers two early steps to be the most critical in the overall exhibit development process: I) making the exhibit topics interesting and relevant to the audience; and

2) creating a team of content experts or advisors, each with specific roles and responsibilities, who became partners in exhibit

development.



and be active, visitors can have fun trying a new game or perhaps a more familiar one. Time inside and outside *Health House* involves active playing, increasing physical activity and making healthy food choices.

The Institution and Its Environment

The Children's Museum of Indianapolis is the largest children's museum in the world. Visitors enter immersive, interdisciplinary experiences that promote inquirybased family learning across the arts, sciences and humanities. Situated on fourteen acres, the 433,500square-foot, five-level museum houses eleven permanent exhibits,



A young museum visitor learns about germs and how good hand-washing skills can help him stay healthy.

two traveling exhibit spaces, a children's theater, a planetarium, a public library (the only full service public library in a museum in the U.S.), several classrooms and more than 120,000 objects in its collection. Having served its community for more than eighty years, the museum's mission is to create extraordinary learning experiences that have the power to transform the lives of children and families among its primary audience of families with children ages ten and younger. It welcomes more than one million visitors per year and counts 30,000 member households.

Why a Health Exhibit?

Health House is an important part of a larger museum-wide health programming initiative, known as PlayFit, that includes several public, health-focused events throughout the year; replacement of soda beverages with water and 100 percent juice products at its community festivals; and the introduction of a staff fitness room. All of these efforts are direct responses to the growing rate of childhood obesity in recent years.

Museum exhibits and programs have always been active, healthy activities but the museum had never promoted them as such. Moving, bending, reaching and walking were all a part of a museum visit. Children and families were in near constant motion while at the museum. Healthy activities in the museum, previously accessible only as stand-alone programs, are now packaged together. The museum measured the average number of steps children and adults took during each visit and even compared the number of steps when walking between floors versus taking the elevator. Pedometers are now distributed at special events for families to count and celebrate their number of steps. The museum hosts four to five special health-related public events per year, which are included with general admission; one to two of them take place during admission-free times.

To offer healthy programming as a constant, year-round presence, a concept for a permanent exhibit was developed. Permanent exhibits have a life span of ten to twenty years in the museum. This new exhibit, focused on human health, fills a void in science programming. Health topics are some of the most common field trip requests from teachers, and museum staff rate health subjects among the most frequently asked questions from visitors throughout *Science Works*' twelve-year history. A new human health exhibit provided the museum with a chance to refurbish an outdated and under-trafficked area of *Science Works*, no longer used for its original intent (a live animal care facility).

The Development Process

Exhibit development is the most well-defined and inclusive staff process at the museum. With nine stages of progressive exhibit development, each with its own defined outcomes and required executive staff approvals, an exhibit does not move beyond the conceptual stage unless commitments for full funding are in place. This "Fund Before You Build" policy ensures that staff spend the appropriate amount of time on each stage of exhibit development so that prospective funders can be confident in the museum's ability to deliver on a proposed product.

As a result of the creation of the health-focused special event series PlayFit, discussions surfaced internally about a more comprehensive health initiative. Health topics were visible and top-of-mind to staff, many of whom were very excited about them. To date, health programming had been somewhat informal, but now the museum would put a public face to private core beliefs. A museum trustee who also served on the board of Health Care Excel, a large not-forprofit healthcare records management organization, expressed his company's desire to give back to its community. With Health Care Excel's interest, the concept for Health House began as a twenty-page description of the exhibit's main messages and a proposed space layout. Six months of discussions occurred, a time during which Health Care Excel carefully examined its commitment to underwriting an exhibit at the museum and involving its own board in the approval of this first-time initiative for their organization. Health Care Excel's board voted to underwrite the exhibit in May 2006, and Health House was scheduled to open less than a year later.

The next step was to identify a team of exhibit advisors to serve as content experts. Working jointly with Health Care Excel, seven experts were asked to participate: the deputy state health commissioner, a physician in developmental pediatrics from a prominent challenging for museum staff to know which direction to take. Based on their joint expertise, advisors quickly narrowed the focus. Having worked directly with children and families in the health arena, they knew the issues up front, what questions were most frequently asked by parents about their children's health and what caused parents the most concern. From the museum's standpoint, exhibit topics had to be relevant and provide children and parents with something to take home and use right away, like a game or recipe. Advisors concurred that because children are more receptive to new messages about food and exercise from ages four through eight-the same time that their parents had the most questions about health topics-the target age range for the exhibit would cover that four-year span. Because the exhibit setting was a house, advisors thought that families would consider the space to be familiar and more relevant to their daily lives. Advisors reminded everyone that today's parents are overwhelmed by messages about nutrition and exercise—and overwhelmed consumers tend to give up-so the exhibit needed to focus on the most pressing children's health topics for parents.

One advisor was a strong advocate for the use of tap water as a healthy choice, because parents felt they weren't making the best choices unless they purchased more expensive bottled water for their children. Another felt that exhibit emphasis should be placed on families eating meals *together*, which studies have shown results in healthier food choices. The nutritionist stated that healthy snack recipes were the number one request from parents—specifically how to make them taste good *and* be healthy. So, staff focused the kitchen-area interactives on snack recipes versus whole meals. The exhibit developers' main challenge was how to fit all these compelling, relevant messages into a 700-foot exhibit space, based on a preexisting house facade and floor space footprint.

Exhibit advisors, enthusiastic about the opportunity to communicate important health messages to a very large number of families,

> all agreed to stay on beyond the exhibit opening. They are invited to participate in the annual Healthy Habits professional institute for educators.

local children's hospital, two pediatric nutritionists from a local university, a pediatric dentist, a physical education teacher from a local school and finally, the executive vice president of Health Care Excel.

Advisors represented a variety of aspects of health and wellness; all were from the Indianapolis community. Their primary role was to identify the most important issues around children's health and to advise the museum staff on content. They agreed to work with the museum in specific ways, such as reviewing proposed label copy and scrutinizing exhibit-related program ideas.

The exhibit advisors were the most crucial element in the early stages of exhibit development. The topic of health is huge. It was



The bright, airy Health House kitchen appeals to museum visitors.

Because the exhibit setting was a house, advisors thought that families would feel the space was familiar and more relevant to their daily lives. They added that today's parents were overwhelmed by messages about nutrition and exercise—and overwhelmed consumers tend to give up—so the exhibit needed to focus on the most pressing children's health topics for parents.

The Outcomes

Health House had to be fun and playful, not preachy. Surprisingly, this outcome presented the greatest challenge to museum staff, who were used to creating engaging environments in which messages or being told what to do placed a distant second to just having fun. One creative solution: label formats produced in rhyme or as short poems. Health House labels are meant to be read out loud and are fun to read. For example, one label says,

"Why eat the same thing, day after day?

Try yummy new foods, let your taste buds play!" And another reads,

"Bottled water is steep,

Tap water's cheap."

Remedial evaluation is being conducted in *Health House*, with summative evaluation to follow. With the help of nutritionists from the advisory group, studies have been conducted on the kitchen-area computer interactives. There have been timing and tracking studies as well. After opening, the exhibit's sound was evaluated, changed and improved. Since nonreaders are part of the exhibit's target age, sound is an important element. Some design elements, such as vaulted ceilings that make the exhibit feel larger, required greater sound engineering. Acoustic panels and different speakers were added. Some messages originally thought best delivered by sound were removed and instead reinforced through tactile delivery, or exhibit components to touch or manipulate.

REPLICATION TIPS

Health House can be replicated in any museum setting. At 1,345 square feet (700 square feet for the interior, thirty-five square feet for the front porch and 610 square feet for the front yard programming space), the entire exhibit could be replicated or could be scaled down to include only one section, such as the popular kitchen area.

Early exhibit developmental steps included the following:

1) identifying the need for health-related exhibit content;

2) writing a conceptual document describing the proposed exhibit for use with potential funders;

3) identifying a space in the museum in which to house the exhibit;

4) securing funding;

5) creating an advisory team of content experts to work with the staff project team;

6) conducting front-end evaluation to understand what topics were of interest to museum visitors and members and their level of knowledge on these topics; and

7) utilizing the advisory team to narrow the scope of the health topic to the most important, relevant issues.

The museum considers two early steps to be the most critical in the overall exhibit development process:

1) making the exhibit topics interesting and relevant to the audience; and

2) creating a team of content experts or advisors, each with specific roles and responsibilities, who became partners in exhibit development.

FOCUS THE MESSAGES

In making *Health House* relevant to the central Indiana community, the topic of safety emerged as an important message in planning discussions with our advisors. Without this input, the exhibit most likely would have focused exclusively on standard topics like nutrition and fitness. The children's hospital, represented on the advisory group, had just launched a highly visible community education campaign about child safety, targeting prevention for the top three reasons why children arrive in the emergency room (car seat safety; child pedestrian injuries, including parents backing a car up in the driveway and not seeing a child; and burns/scalds). For the advisor from this hospital, safety was top priority, so this community need became part of the exhibit. A fire evacuation plan, smoke detectors and a bath mat in the bathtub were included in the exhibit's displays. At a museum serving another community, where year-round outdoor play is a relevant topic, for example, perhaps more space would be devoted to incorporating natural settings into daily active play.

WORKING WITH ADVISORS

The exhibit advisors truly acted as full partners in *Health House's* success. Several chose to continue to work with the museum long after the exhibit's opening. To keep up this level of advisor participation, museum staff interact with advisors on a frequent basis, leading and managing a group double the size of a normal exhibit development team. Building in the staff resources and time to do this is a critical aspect of exhibit development. Advisors also needed to learn the museum's culture and the roles and expertise of various museum staff on the exhibit team. The reverse is also true: museum staff had to learn each advisor's background, company culture and leadership style to best manage the group.

Build in time on the front end for "get to know you" sessions on both sides of the team (museum staff and advisory board) and from the beginning, think beyond the end of the project. Some of our advisors loved the work they did for Health House, but we had not defined the next steps. Some advisors have come up with the "what's next" on their own, e.g. a graduate study on some element of visitor interaction in Health House. But museum staff move on once an experience is developed and tested. The museum doesn't have the resources to keep an advisory team engaged after the project is completed. Consider the "what's next" at the beginning of the partnership. Does a museum want to communicate up front that the project is over once the exhibit opens or the program launches? If an advisor really enjoys his/her experience with the specific health-related project, is there another way to continue his/her involvement, such as through board or volunteer service? Are there remedial studies or portions of the project that will extend past the launch/opening?)

The Discovery

In *Health House* two main elements converged: a museum space needed redevelopment and a relevant topic garnered the interest of funders, content advisors and the community. These elements combined to bring a new, fresh exhibit offering to the museum on a topic that has continued to engage the exhibit team in learning how visitors interact in the space. The exhibit has generated media stories and interest long after its opening. It also has engaged community partners to continue to use *Health House* as a springboard for opportunities to reach children and families with the most current and relevant health messages.

Grasshopper Grocery and Butterfly Bistro Healthy Eating at an Early Age

Portland Children's Museum Portland, Oregon

Shannon Grosswiler, Director of Marketing and Communications

renewed commitment to the health of the community's children motivated the redesign of Portland Children's Museum's play store and café space. The museum staff, board and exhibit sponsors saw an opportunity to encourage healthy eating behaviors among children and families in a role-playing museum environment. A grocery store with realistic, healthy food items and kid-sized props is an ideal place for families to explore smart food shopping and healthy eating habits important to their overall well-being.

In the new *Grasshopper Grocery and Butterfly Bistro*, the team established a concept that reflects a straight-from-the-source feel. It is intended to portray a "corner store" environment instead of a mass-produced box store. The tin roof on the façade, the handpainted signs, a wheelbarrow parked at the entrance and the wooden produce crates and barrels create a homey, down-to-earth space. Even the lattice ceiling creates an effect by lowering the actual ceiling to a more kid-friendly height.

In this 700-square-foot area, children wheel miniature grocery carts through the aisles and make choices about what to place in their carts for purchase at the checkout stand. Sometimes the children simply put every item they can find in their cart, but their parents often ask them why they made certain choices, or the adults talk about why the food choices they made were smart and healthy. For example, one father said, "Oh, all the peaches are gone! Peaches are my favorite, I understand why they're gone!" The grocery shelves are full of realistically weighted and textured replicas of healthy foods including fruit, vegetables, bread, canned goods and cereals, leaving very few processed, sugar-laden products on the shelves.

Next door at the *Butterfly Bistro*, pots and pans are at the ready. Children can cook and prepare an imaginary meal from their shopping purchases or create a sandwich from the deli counter. Parents often sit on the stools at the *Bistro* counter, coaching cooking techniques, requesting favorite foods, waiting for their breakfast order to be completed or helping their child take the "to go" order from the bilingual phone message recorded on the public phone.

In a complete role reversal, children shop, cook and feed their parents. While children delight in these experiences, they are often very serious about the work that goes on in the store. Whether they are checking out a new friend's groceries or making a sandwich, the level of concentration leads some children to stay in the store for hours.

Because most of the children are under age six and are not reading at high levels yet, it was important to make the role-playing experience as tactile and visual as possible. A large portion of the budget was invested in produce such as lettuce leaves, tomatoes, apricots, carrots, potatoes, plums, corn-on-the-cob, apples, watermelon and other fruits and vegetables. *Bistro* options include over-easy eggs, whole wheat bread, turkey, ham, roast beef and three kinds of cheese for sandwiches, plus tomatoes and lettuce. The goal? Provide the basics in whole foods and let the children role-play how to shop for and cook with these elements.

Labels for each area are in Spanish and English, and there are menus posted on the walls of the *Bistro* that include well-rounded meal selections. Photos of children at outdoor markets, in orchards



Selecting from among a range of healthy "foods" at the market, a young chef plans her menu.

or on farms along with plants and baskets decorate the walls and the baked goods corner. A flower stand sits outside the market, underneath the tin roof façade and next to a wooden bench. All of these details are the result of observations at made at farmer's markets and organic food or natural food stores. Exhibit sponsor Fred Meyer Company supported the design idea because it was the same aesthetic direction they took in remodeling their own grocery stores.

The Institution

Founded in 1949 as part of the City of Portland's Parks and Recreation Department, Portland Children's Museum became an independent nonprofit organization and moved to its current location in 2001. Since moving to a city-owned building in Portland's Washington Park, the museum has welcomed more than 1.4 million visitors. Annual attendance has grown to 240,000 children, from birth to age ten, and their caregivers.

The mission of Portland Children's Museum is to inspire imagination, creativity and the wonder of learning in children and adults by inviting shared moments of discovery. Art and the celebration of play is a unifying theme throughout the museum's exhibits, studios and the classrooms of Opal School, the museum's preschool and Kfive public charter school.

The museum's exhibits stimulate children's curiosity and encourage the kind of connected, interactive play between the caregiver and child that is vitally important for young children.

The Grasshopper Grocery and Butterfly Bistro fill out the role-playing side of the exhibit experience. They are the latest remodel of the existing museum and are part of an overall permanent exhibits plan that also includes the following:

• The Dorothea Lensch Play It Again Theater: Kids meet and direct a play together, using real sound effects and a light board. The museum staff, board and the long-time sponsor of the grocery role-playing space recognized the need for a significant upgrade. Funding for the remodel came at an excellent time, in tandem with the healthy choices initiative the museum team was beginning to address. • **Kids Care**: Children become caregivers as they feed, bathe and clothe babies and rock them to sleep in a rocking chair. Here they can also see the inside of an ambulance or put on scrubs and check out x-rays.

• **Building Bridgetown:** Children panel walls, connect plumbing, play with doorbells and hinges, take measurements, build with blocks and climb up to the second story of the seventeen-foot-high house.

• **Dig Pit:** Kids develop gross motor skills in a play space filled with rubber "gravel," plenty of buckets, shovels, dump trucks and a conveyor belt.

• Water Works: Children crank, funnel, pour, squirt, measure and float whatever they can find. Features a twelve-foot high waterfall and a handcranked "conveyor belt" that carries water in whimsical recycled objects like mugs, a twirling bouquet of kitchen mops and even an old shoe!

• **Baby's Garden:** Babies and toddlers crawl through this multi-sensory, magical forest where they can peek into the peeper's nest, scramble over roots, follow the glass river and enjoy the sounds and textures of falling leaves.

Responding to Community Needs

Since imagination and creativity develop through play and playful inquiry, the store and café environments are popular favorites. Children know exactly what their roles are in these two areas because they are duplicating behaviors they have seen many times before in the adult world. Before the remodel, the café and store space did not reflect any especially healthy eating or cooking models. The new version was a chance to change the museum environment in a positive way.

The strategic priorities and outcomes that came from the museum board's 2007-2010 Anniversary Vision included the goal of "supporting the imagination and creativity of children by strengthening their physical development." Looking at the growing epidemic

of childhood obesity, the museum's board and staff declared that offering healthy food choices, as well as expanded physical activities and play spaces to children, are vitally important.

In 2007, the museum staff formed a Healthy Food Task Force that did two things: 1) gave advice on what foods would be offered in the grocery and what menus would be posted around the *Bistro* and 2) replaced museum vending machines that served soda, candy and chips with another choice for visitors and staff. In September 2008, the museum opened the *Caterpillar Café*, an on-site real food



With his mother's help, a toddler carefully selects tomatoes to place in his cart at the market.

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café. Its menu includes sandwiches, natural fruit bars, yogurt, string cheese, whole wheat bagels, real fruit, smoothies and yes, some "treat" foods, but those choices do not dominate the menu.

The other commitment that the board, long-time funders and museum staff made was to move forward on an ambitious capital campaign to create an outdoor exhibit space, including a climb-

ing wall, water features and rock wall structures. The museum had the option of simply raising money to build a structure around a carousel given to the museum in 2007; however, the entire museum team decided to expand their vision and would only start a capital campaign that included the funding of a larger, more comprehensive outdoor activity environment for our visitors.

Funding the Exhibit

The museum staff, board and the long-time sponsor of the grocery roleplaying space recognized the need for a significant upgrade. Funding for the remodel came at an excellent time, in tandem with the healthy choices initiative the museum team was beginning to address.

The museum is fortunate to have a long-standing relationship with Fred Meyer Grocery stores. Now under the Kroger Stores umbrella, the Fred Meyer Fund of the Kroger Foundation gave the museum \$95,000 to refurbish the store and serve as title sponsor of the space for two years. *Grasshopper Grocery* uses Fred Meyer branded food in its dry goods and dairy section and also uses Fred Meyer fabric bags along with the miniature carts for shopping.

This funding allowed the creative team to develop a store that has an organic feel with space for crates, baskets, and even a wheelbarrow parked "outside" to create a neighborhood vibe that aligned with the funder's intentions for their own stores.

REPLICATION TIPS

PREPARE CONCEPT

The sponsor, program department, education department and exhibits team began by making a decision to revamp the space and make a connection between healthy food and healthy living by immersing families in an environment where fresh, whole foods are offered. The tools to create healthy meals were central to the experience.

The team wanted to include a natural presentation area using wooden crates and barrels, hand-painted signs, whole fruits and veggies, baskets and flowers and plants to counter the prepackaged dynamic of a big box grocery store.

DEVELOP PROPOSAL

Using the concept, the exhibit team sketched out a floor plan based on the current space and used images collected from research at local grocery stores and from other grocery store exhibits around the country.

IDENTIFY A SPONSOR

Fred Meyer Stores have been the grocery sponsor since the early 1970s. They wanted to continue their sponsorship even though

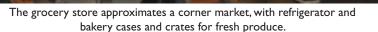
Kroger, a national chain based in Ohio, now owns them, because this reinforces their commitment to the local community.

It is very important to include the sponsor(s) early in discussions to ensure that the museum is meeting the sponsor's objectives. The community affairs team at Fred Meyer received initial concepts and photo ideas for the store. They monitored the exhibit as it came to life. The museum and the sponsor stayed in close touch throughout the process.

DESIGN THE EXHIBIT

The design of this exhibit had cerFruits & Vegetables Serving the Audience

counters.



In the new Grasshopper Grocery and Butterfly Bistro, the team established a concept that reflects a straight-from-the-source feel. It is intended to portray a "corner store" environment instead of a mass-produced box store. The tin roof on the facade, the handpainted signs, a wheelbarrow parked at the entrance and the wooden produce crates and barrels create a homey, down-to-earth space. Even the lattice ceiling creates an effect by lowering the actual ceiling to a more

kid-friendly height.

tain non-negotiable elements. There was no more than 500 square feet in which to work. The aisle spaces had to be large enough for wheelchair accessibility. The old exhibit needed to be refurbished to save money and resources and because the museum community values recycling and repurposing. In addition, safety and aesthetic elements had to be considered at every level of exhibit design. The exhibit and program team took many visits to other museums and area grocery stores such as Whole Foods and New Seasons, as well as farmers' markets and rural corner stores. Based on what they saw, the concept moved quickly into a "must-have and can-do" list. The baskets, barrels, wood crates, wheelbarrow and miniature carts were obvious choices based on the research. The museum's exhibit team

Bistro, the museum sets an example of the good food choices possible among children and families.

With our real food Caterpillar Café, the museum aligns its reallife food menus in keeping with its anniversary goal of providing healthy eating options during the museum experience. With every exhibit, the museum team attempts to identify with families, respect children and create spaces that are loved by all. Anyone watching dozens of children stuffing their carts with nutritious foods in the new Grasshopper Grocery and serving them up in the Butterfly Bistro sees that the role-playing fun is a great way to get across a serious message.

The personality or flavor of an exhibit has to be reflective of the community it serves. Mothers are so appreciative that the store has been revamped to focus on healthy foods because they are in a constant battle with sugary, processed and convenient options that are too readily available to their children. The Portland metropolitan area is one of the leaders in the whole foods and "go local" movement. With the its new role-playing store, Grasshop-

per Grocery, and the

nearby café, Butterfly

includes a master cabinetmaker on staff who knew how to create the structures that featured the freezers and the dry goods and café

SPONSOR AND PARTNER RECOGNITION

A permanent sign above the exhibit thanks the sponsor. The dry goods and dairy products carry the Fred Meyer label while fabric carry-bags with the Fred Meyer logo are used to collect items in the store. The head of community affairs for the grocery store chain came to the ribbon-cutting event for a photo opportunity and speech. In addition, a press release, 8,000 newsletters and 3,000 e-news blasts went out regarding the new exhibit and highlighting our sponsor.

Our Backyard

Long Island Children's Museum Garden City, New York

Hillary Olson, Director of Education

"I like to play indoors better 'cause that's where all the electrical outlets are." —Fourth grader quoted in Richard Louv's Last Child in the Woods, Saving Our Children from Nature Deficit Disorder, 2005.

ur Backyard is an example of how a simple idea and a very small amount of money can lead to an immersive museum experience that promotes healthy behaviors by encouraging children and their families to explore, learn about and appreciate the natural world.

During the late spring and summer months, Long Islanders tend to bring their families to one of the many beaches on sunny days and to find indoor, air-conditioned places (like the children's museum) on rainy or exceptionally hot and humid days. Year-round, most children are scheduled in sports or other prescribed activities during the day. Compared to other suburban areas around the country, rarely does one see children just "playing outside" on Long Island. But parents all over the country are less likely than ever to take or send their children outdoors for fear of things as varied as strangers, disease, animals and the sun. More and more, children are growing up indoors without meaningful connections to the natural world. The "natural world" on Long Island is getting smaller too—much of its already limited open land has been, and still is being, bought up by developers for housing or retail purposes.

Our Backyard began with the simple idea to create some outdoor space near the museum where children could explore a natural environment using all five of their senses. This space would be a natural complement to two of the museum's existing galleries, which focus visitors' attention on the geology, ecology, plants and animals in the Long Island environment. Having a content-rich outdoor space in a children's museum was supposed to plant (no pun intended) the idea that outdoor exploration is a necessary part of every child's learning.

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The Museum's Community

The Long Island Children's Museum (LICM) is located in central Nassau County, New York, about thirty miles east of New York City in an area that is being developed as the county hub. The museum is housed in a 40,000square-foot building, converted from an old airplane hangar, at historic Mitchel Field, now the site of a fifteen-acre cultural complex called Museum Row. The museum, an anchor for this site, shares the turf with an aviation museum, an IMAX theater and a firefighter's museum. LICM's location is suburban but with



The award-winning *Our Backyard* grew in a former asphalt-coated alleyway next to the museum.

many urban characteristics, such as being located near a number of colleges and universities, the county department of social services and bordering densely populated communities. The communities surrounding the museum are home to people from an exceptionally diverse range of ethnicities, cultural backgrounds and income levels. The museum serves visitors from all of Nassau and Suffolk Counties on Long Island and the boroughs of New York City. Currently, 265,000 visitors per year stream through the doors and the museum has plans to do a major outdoor expansion for which the *Our Backyard* exhibit will serve as a prototype.

The Long Island Children's Museum is bordered by a parking lot on its west side, roads to the north and south and a rundown airplane hangar to the east. The roughly 10,000-square-foot alley between the hangar and the museum had long been a source of concern for the museum as it was, well...really ugly. It was covered with old, cracked blacktop pavement and peppered with rocks, broken bricks from the adjacent building and trash blown in by the notorious Mitchel Field wind. The proposal for an inexpensive beautification project was well received by the museum director, as it was, at minimum, a chance to beautify the alley that many visitors passed on their way to one of the museum's two main entrances.

The Museum Goes Outside to Play

The first incarnation of the space was a low-budget prototype that used colorful plastic tubs filled with reused plastic bottles on the bottom (to reduce weight) and potting soil on top and planted with flowers, herbs and other plants with interesting textures, scents and colors. Visitors who passed the new "garden" were excited to allow their children to explore the plants on their way in or out of the museum.

A high level of participation in the museum's outdoor themed workshops reinforced a trend museum leaders sensed: parents and teachers were making more attempts to get kids "back to nature," in part fueled by a very positive response to the new outdoor area and helped along by the popularity of Richard Louv's 2005 book *Last Child in the Woods: Saving our Children from Nature Deficit Disorder.* Museum staff decided to look for funding to grow the project into a full blown outdoor exhibit.

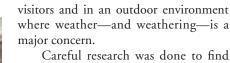
In his book, Louv shows that today's children have a very limited view of what it means to be outdoors or "in nature" compared to their parents' or grandparents' generations. Louv finds correlations between the lack of time today's children spend in nature and the increased rated of obesity, ADHD (Attention Deficit Hyperactivity Disorder) and heightened stress levels in children. Pediatricians and other healthcare professionals are joining this now-international discussion, pointing out the health benefits, both physical and cognitive, for children who engage in free, unstructured outdoor play on a regular basis. With this in mind, the project team created a vision of exposing children to nature by creating an inviting outdoor exhibit that would potentially spark families' interest in having other outdoor experiences.

For three years, the space grew and evolved as the exhibit team—a project manager, a designer, a horticultural specialist, an educator, a writer and a visitor advocate—worked to design, build, prototype and modify components. As LICM had been open in its current location for less than two years when the project started, this was the first major exhibit development since the grand opening.

A local senator secured a \$125,000 government earmark that provided enough capital to plan and prototype the full, expanded exhibit. In 2006, the blacktop was torn up and the area was graded. The addition of top soil allowed the exhibit team to create a permanent exhibit with a natural garden feel. Other in-kind donations of plants, supplies, materials and, in some cases, labor were received from a local nursery, a landscaping company, a pond supply company and a local botanical garden. It could not have happened without them, since the earmark alone would not have covered the exhibit as it had been envisioned. Maintaining relationships with these partners and coming right out and asking for help when staff needed it was crucial to the final outcome.

The space continued to evolve as activities, components and materials were built, prototyped, tweaked and prototyped again. Kids in the museum's KICKstart education program, serving four of the neediest school districts on the island, helped to plant flowers around the exhibit's perimeter during museum field trips. Creating ownership of this exhibit among visitors has proved easy—there is almost always something to plant, clear, weed, prune or water. *Our Backyard* provides visitors with one of the most authentic experiences the museum has to offer.

Our Backyard now includes areas for exploration of herb, vegetable and ornamental gardens. Children can slide down a hill, hide in the branches of a weeping mulberry, shovel or rake gravel and build towers with wood "tree blocks." Spaces for active digging and planting are balanced with contemplative areas featuring books, art and poetry. Poems, lyrics and verses are cleverly placed throughout the exhibit. An arbor-shaded bench with nature-themed books is popular with parents of very small children. Older kids are drawn to areas that welcome gross motor activity and are placed throughout the exhibit to enhance the backyard feel and to encourage children to use their whole bodies to explore. Another area is devoted to meteorology with barometers, an anemometer, a sundial and thermometers to read and manipulate. Children paint on slate with water to combine art and science as they watch their paintings evaporate into the air. A large sail catches the wind in a boat-shaped deck where imaginative, pretend play happens naturally. Many of the components are the result of careful, and typically inexpensive prototyping, allowing staff to discern what activities and materials work best both for our



weather-resistant and environmentally low impact materials. Decking made of recycled plastic, real working compost bins and plantings made with reused materials such as a flower bed inside an old bed frame, make *Our Backyard* a truly eco-friendly exhibit. Reusing materials in creative ways helped keep costs low.

All of the plants in the exhibit are non-toxic and child-safe. Staff members encourage children to touch, smell, take and eat herbs and vegetables from our garden. Many have noted the shock and surprise on parents' faces when they see their children eating peas, beans, lettuce or even radishes picked straight from the vegetable beds. When children pick, wash and cut vegetables themselves, they are much more likely to try (and like) them.

Plants that attract bees, butterflies and other beneficial insects were strategically located along with places for spiders to weave their webs and an area where children can observe birds that come to the feeders (created by children) that hang along the gate. Each year, the life cycle of the swallowtail butterfly is followed as they land and lay eggs on strategically planted parsley, grow into voracious caterpillars, and, with luck, create their chrysalis in the garden to emerge as beautiful adults. Hand lenses are available for children to



Children can make rainshowers on demand in the fully accessible outdoor exhibit.

In the spring of 2008, a water play area was added....This fun area helps to illustrate the water cycle, but also gets the "air conditioner crowd" outdoors. Water play has transformed the gallery into one of the most popular museum destinations during warm months and attracts visitors who might never otherwise come outside. take a closer look, and staff members point out things like ant hills, butterfly eggs and worms in the compost bin.

Overcoming Surprising Obstacles

Like adults, children will not care for what they do not value. Increasing children's exposure to natural environments helps build an affinity for spending time outdoors. Once a love of nature becomes the norm, it is hoped that caring for nature will follow. Educators tend to focus on doom and gloom when teaching about "the environment:" rainforests are being cut down, the polar bears have no habitat and the earth is warming up too much. Then children are told that they can save the planet by recycling plastic bottles—confusing messages to say the least!

Our Backyard is a window into the natural world that won't save the planet, but will hopefully allow children and their caregivers to have positive experiences there. As children and adults spend more time outside, they begin to understand the importance of clean air, fresh produce and undeveloped land. Children who learn outside want to spend more recreation time there as well. Spending more time outdoors not only increases the amount of children's physical movement, but also reduces screen time. Studies have shown that repeated exposures to natural environments over time can lead to increased comfort with the outdoors and can have a positive effect on children's health, stress levels and ability to focus. *Our Backyard* exposes children to natural cycles—the life cycles of plants and animals, water cycles, the daily cycle of the sun and the yearly cycle of the seasons. Children make healthy food choices by eating right from the vegetable garden.

One of the problems that the museum faced, once the exhibit was built, was getting visitors to go out and explore it as they would any other museum gallery. Not as many people as hoped wanted to go outside, no matter how many announcements were made or free programs were done in the space. In the spring of 2008, a water play area was added where children can create a waterfall, explore a stream, race boats or fish, fill, pour, pump, splash and play in a water table and shallow stream bed that has words such as "Gurgle," "Dribble" and "Lap" imbedded in its stones. This fun area helps to illustrate the water cycle, but also gets the "air conditioner crowd" outdoors. Water play has transformed the gallery into one of the most popular museum destinations during warm months and attracts visitors who might never otherwise come outside.

Our Backyard is open throughout the year, though the water play area is only open from May through October, weather permitting. Because of the cold New York climate, LICM does not keep an interpretive staff member in the outdoor gallery in the winter months. Visitors are free to wander through the exhibit on their own, observing gardens at rest.

Building Partnerships

Coincidentally, in the middle of developing *Our Backyard*, LICM became one of the founding members of LINCK: the Long Island Nature Collaborative for Kids, a coalition whose goal is to give Long Island's children increased opportunities to explore and learn from nature by creating outdoor "classrooms" in parks, preserves and community hubs. This partnership includes the county parks department, the local gardening extension, the county childcare council, foundations, outdoor education groups and others who are committed to outdoor learning for young children.

Working with LINCK and the local cooperative gardening extension has helped the museum to create engaging outdoor programs for kids, including a multi-session junior gardening club, a parenting workshop on sharing nature with children, and nature-themed workshops.

REPLICATION TIPS

Any museum with even a small amount of available outdoor space and some available staff time can create a welcoming environment where children can explore at least some part of the natural world. The beauty of a project like this is that, much like a garden itself, it can grow and change over time. An outdoor nature project does not necessarily have to be approached as another exhibit might be: painstakingly planned for, completely designed and fully funded before the first shovelful of dirt is moved. The original plan for this exhibition focused on simple, small mobile buckets and container gardens on moveable pallets. The process of creating something incrementally has allowed LICM staff to observe, modify, prototype and plan each area well.

Things to think about when creating an outdoor exhibit:

Space: Do you have land that you can work with? Even a small patch of pavement or dirt can house moveable pots with plants to explore.

Climate: Components should be built for your museum's climate. When choosing materials, consider those that are durable and will last through all four seasons.

Infrastructure: Is water readily available? Is there shade, or does it have to be built into the plan? Is access to the outdoor space from the museum easy? Will there need to be a gate to prevent children from running into the street? (Oddly enough, at LICM, one of the major bumps has been who will empty the outdoor trash can.)

Environmental impact: If you are planning a garden or outdoor exhibit to teach about the environment, it makes sense to keep the components environmentally friendly. Building "green" can be more expensive but is worth it in the long run.

Labor: Free or cheap labor for building, landscaping and programming keeps costs low. An outdoor exhibit takes a lot of upkeep, and the water play area required constant staffing. Here are some ideas for recruiting help from the community:

• Many local gardening groups and regional cooperative gardening extensions have volunteers looking for projects. Rotary Clubs and other civic and volunteer-based organizations can help with the project once it's been planned, as can scout troops—a great way to involve kids in the process.

• Many college students studying environmental sciences, education or other related topics are looking for summer internships in an educational setting and will work for free (or cheap). LICM uses interns to create and conduct mini-workshops in *Our Backyard*, and also takes interns in the exhibits department to help design and prototype new components.

Funding: Many foundations and corporations are interested in giving money to support green projects for children. LICM has found that many parts of this project were relatively easy to fund. Nurseries and garden centers—large and small—can be great sources of in-kind donations.

Organizational direction itiatives that seed health and wellness messages throughout the institution

Museur



Stepping Stones Museum for Children Norwalk, Connecticut

Carol Brennan-Smith, Director of New Ventures

f anyone can find fun, compelling ways to teach children about their bodies and health, it's a children's museum. Children's museums have a captive audience of young, eager families and school groups coming through the doors on a daily basis. Whether it has a health exhibit or not, children's museums are well-positioned to galvanize community experts and resources to bring crucial health messages and programming to a community. And best of all, they have the experience to make it inviting, inclusive and fun!

Project Background

Located in Norwalk, Connecticut, Stepping Stones Museum for Children is the third-most visited family attraction in Fairfield County with more than 215,000 visitors a year, 3,500 member families and 16,000 group visitors. Opened in 2000, the current facility is 19,000 square feet, half of which is gallery/exhibit space.

In response to widespread local, state and national concern about children's health, the museum engaged in community conversations with more than 500 individuals and fifty statewide health, family and child-serving organizations to assess community needs and interests around children's health issues. Participants expressed growing concern over poor nutrition and diet, the lack of physical fitness and related health problems like obesity, allergies and asthma.

The outcome of these conversations is the creation of a four-year, statewide children's health initiative based on the premise that early intervention and prevention are critical for establishing a healthy lifestyle, and that even small changes can have a positive impact on both short-term and long-term health. The result, Healthy Children, Healthy CommunitiesTM, is built upon an innovative collaboration

The outcome of these conversations is the creation of a four-year, statewide children's health initiative based on the premise that early intervention and prevention are critical for establishing a healthy lifestyle, and that even small changes can have a positive impact on both short-term and long-term health. between museum staff, public policy advocates, educators, health experts and business leaders. Project components include the following:

• *Healthyville*, an 1,500-square-foot traveling exhibit;

• educational programs;

• statewide community outreach;

• a series of eight health vignettes broadcast on Connecticut Public Television during children's programming. Topics include nutrition, fitness, hygiene, safety, asthma and allergies, sleep and stress, early brain development and the role of children's play.

Developing, designing and producing *Healthyville*, its programs and vignettes was a two-and-a-half-year effort. Project costs are expected to total \$3 million over four years.



Children learn to make healthy meals by selecting from all the food groups.

Welcome to Healthyville!

The exhibit features six main attractions, fifty hands-on activities and ten computer games—all within the vibrant *Healthyville* community—to help children learn more about nutrition, fitness, hygiene and safety.

• Visit the Main Brain to explore senses, emotions and memory.

• Ride a bike, stretch your muscles and observe how the cardiovascular, respiratory, muscular and skeletal systems work.

• Learn about the digestive system, nutrition, calories, energy and smart choices at *Good Foods Market & Cafe*.

• Role-play as doctors and dentists at the *Healthyville Community Center.* Or be an EMT in a life-sized ambulance.

• Drop by the local TV station, W•BOD, and report "live" from inside the body. Crack yourself up mixing popular body sounds.

• Find out why it's important to take your shoes off before going inside, wash your hands before eating and get a good night's sleep.

• Test your smarts with ten interactive computer games that explore memory, emotions and senses, plus the digestive system and of course germs!

Community Partners

The initiative is led through a partnership consisting of the Connecticut Commission on Children, Connecticut Public Television, the State Department of Public Health, the State Department of Environmental Protection, Food Allergy Institute, Edward Zigler Center in Child Development and Social Policy, Norwalk Hospital, Yale School of Medicine, Yale School of Nursing, Children's Health Environmental Coalition and the Connecticut State Library. While the partners list is varied and continues to grow, the common thread is the shared desire to affect change in individual behavior, as well as public policy, thereby improving the long-term health of children and communities.

From the beginning, museum leaders recognized the profound impact that a project like Healthy Children, Healthy Communities could have on helping children and families live healthier lives, and in turn foster healthy communities. Leadership, teamwork and effective communication were critical to a successful launch and implementation. The team was involved in all aspects of the project and remains committed to its success, recognizing its long-term growth potential for the museum.

Audience

While Connecticut is often characterized as affluent, the state is increasingly diverse—economically, racially, ethnically and linguistically—with significant numbers of at-risk children and a large achievement gap between minority and non-minority students. At a glance, 28 percent of Connecticut's public school students live in poverty, defined in terms of eligibility for the federal Free and Reduced-Price Meal program; an estimated 60 percent of all uninsured children are of Hispanic heritage; among poor families, dental disease is found in 80 percent of children ages two to five; and asthma affects more than 10 percent of Connecticut children under age five, with asthma rates highest for Hispanic children and for children living in the state's largest cities.

To ensure the greatest impact, Healthy Children, Healthy Communities is targeting cities with the largest populations: Bridgeport, New Haven, Hartford and Stamford. Additionally, strategic partnerships with the Connecticut Department of Public Health, Connecticut State Department of Education and Connecticut Commission

on Children, among others, serve as gateways for reaching families in need. These partnerships help broaden the museum's reach into the community across socioeconomic and multicultural lines.

Stepping Stones has devoted significant resources within its operating budget to reduced-fee and free-admission programs to ensure *all* families and schools have access to *Healthyville* and its related programming. Currently, 20 percent of the museum's admissions are discounted or free.

Evaluation

Evaluation is ongoing. The museum created an outcome scorecard for the project, which includes measurable goals and objectives for the exhibit and related programs that are both quantitative and qualitative. These measurements are intended to evaluate educational gains, community partnerships, short-term and long-term behavioral change and demographic reach.

Since opening in December 2006, more than half a million visitors have explored the exhibit.

Visitor surveys indicate the following outcomes:

• 73 percent of the children who visited *Healthyville* learned something new about their bodies and health;

• 90 percent of the respondents are committed to pursuing a healthy lifestyle for their family;

• 95 percent feel *Healthyville* is a valuable resource.

• When asked how *Healthyville* affected family behavior, the top two responses were 1) opening the door for discussing and teaching children about good health, and 2) making healthier food choices.

Most Successful First-Year Components: The Exhibit and In-house Programs

Available to visitors every day, the exhibit, with all its bells and whistles, is a constant reminder of the museum's commitment to health. Given the variety of content and activity, it is very conducive to family learning and repeat visitation. The response of community partners has been overwhelming. The broader initiative has created a universal platform for the community to gather and exchange ideas and information. The exhibit serves as a great backdrop for community events and meetings. Throughout the year, public officials, business leaders and other influential individuals concerned with education and health have toured *Healthyville* and held meetings on-site in an effort to raise awareness of the exhibit and its benefits to the statewide community.

REPLICATION TIPS

Although the Healthy Children, Healthy Communities initiative is large, its exhibit, community programs and special events are all scalable. Think big. You will be surprised at the support you will receive from key stakeholders—including the donors who make it all possible.

EXHIBIT TOP PICKS

Exhibits are visible, tangible experiences that reinforce a museum's commitment to health, but they are costly and require significant resources to plan, develop, fund and market. If you can't do a major exhibit, think about a small component or two. Based on informal staff evaluation, the following *Healthyville* areas and activities are quite popular:

• Market and Cafe: Kids love to grocery shop.

• W•BOD Television Studio: Who doesn't want to be on TV?

• Big Mouth, a giant mouth where children learn to floss and brush their teeth. This simple component addresses a very important issue—dental hygiene.

COMMUNITY PARTNERSHIPS

Beyond the excitement and benefits of a permanent health exhibit lies the promise and potential of community partnerships. There are infinite (and low cost) ways for interested museums to pursue dynamic opportunities with local community partners. Most communities have hospitals, doctors, nurses, dentists and trainers who would (and should) jump at the opportunity to share their expertise with your visitor base. The programs



learn how to floss and brush their teeth.

Healthy Children, Healthy Communities has

been instrumental in taking the museum to

a new level, expanding its regional impact,

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tant health messages and resources.

listed below can easily be tweaked to meet your community's unique needs.

Health Fair To help position the museum as a new health resource in the community, Stepping Stones hosted a health fair that coincided with the opening of the new exhibit. This tented event offered local hospitals, fitness clubs and community groups a chance to showcase their work and hand out materials. As with most events, a key requirement is that the booths offer activities and demonstrations that engage children.

Dental Health In celebration of National Children's Dental Health Month, the museum partnered with Norwalk Dental Smiles and the Connecticut Dental Hygienists' Association to promote proper dental hygiene, perform dental screenings and in select cases, offer free dental care. Brush up on your local dental associations to see who might want to partner with you. Don't forget about local companies who can donate toothbrushes, toothpaste and floss.

Health Insurance HUSKY (Healthcare for UninSured Kids and Youth) representatives attended select museum events to teach visitors about this important program and to register qualifying families for free health insurance. See if your state offers such services and invite them onsite to talk to your visitors.

Bicycle Safety In support of outdoor play and safety, the museum partnered with Fairfield County Safe Kids Coalition to promote bike safety, offering free helmet giveaways and proper helmet fittings. Check out local bike shops and cycling organizations to see what they might be willing to do or donate.

Nutrition The Norwalk Community Health Center presented nutrition workshops to teach visitors about food groups, nutritional labels and how to make good food choices. This would be pretty easy to replicate with different partners.

Outdoor Play The Norwalk Community Soccer League led soccer clinics to teach children basic soccer skills, team-building and sports safety. Reach out to your local sport camps or clubs to see what might work at your museum.

Teddy Bear Clinic Greenwich Hospital hosted a Teddy Bear Clinic for children to learn about what it is like to go to the hospital. Teddy bears belonging to more than 500 visitors were "treated" by hospital doctors, nurses and staff. A very cute event! This is actually a major event held at the hospital, with two additional clinics hosted at Stepping Stones each year.

Art Exhibit Around the World in Healthy Ways was an international children's art exhibit that depicted what nutrition looked like to children around the world. Artwork was provided by Creative Connections, a local community partner whose mission is to connect children around the globe through the arts.

Healthy Parenting Workshops Teaming up with the Stamford-Norwalk Junior League, Stepping Stones developed a multi-year parenting program. One event was a Healthy Parents Nutrition Seminar featuring Dr. David Katz, a nationally renowned authority on nutrition, weight control and the prevention of chronic disease. Junior Leagues are great potential partners. Each year they support a variety of programs tailored to the needs of the community—anything family-oriented and educational is often a great fit.

KEYS TO SUCCESS

Having worked with hundreds of partners over the years, museum staff have learned that this is an area where we can lead and help facilitate. For those just beginning to work with partners, be sure to communicate your vision, discuss possibilities, decide upon outcomes and develop a project plan to assign tasks and track progress. This way, all internal and external parties know exactly what is expected.

THINK BIG – THINK NATIONAL

In August 2007, the American Heart Association asked Stepping Stones to partner together on Nickelodeon's Worldwide Day of Play, a day dedicated to raising national awareness about the importance of healthy, active living. Stepping Stones served as Connecticut's host site for a free day of play and special programming, which drew more than 2,000 visitors.

As a result of this partnership and a successful Worldwide Day of Play celebration, Stepping Stones was selected by the Alliance for a Healthier Generation as one of six national Lead Organizers to host a Youth Forum on Children's Health, spotlighting Connecticut youth and some of the good things they are doing to promote healthy living. This was a huge opportunity for our state, our community and Stepping Stones. *(Healthy tip:* if you haven't already done so, reach out to the Alliance and to your local American Heart Association today.)

TRAVEL TRUNKS

If you have content, repurpose it! Create travel trunks and smaller travel kits loaded with lesson plans, curriculum-based educational games and activities fostering healthy living. Make them available to teachers and school groups who might not be able to visit your museum. Also great for pre/post visit materials.

MUSEUM OPERATIONS: PRACTICE WHAT YOU PREACH

To further demonstrate our commitment to health, the museum revamped its cafe to ensure healthy options were plentiful and that treats were just that—treats. The focus is now on fruits, salads, sandwiches, water and milk. This shift has been well received by museum visitors and staff. *Healthyville*-themed signage was also added to help raise awareness of the importance of a balanced diet and exercise, food allergies, hand washing and recycling. Do it. If you don't, your visitors will call you on it. Trust us!

VISITOR SURVEY TOOL

The museum gauges success through various measures—visitation, engaged community partners, new programs and events and the continuous advancement of the museum's mission. A key tool used to measure visitor impact is SurveyMonkey.com, an online email survey tool. Throughout the year, various surveys are launched to evaluate the visitor experience, new exhibits and future exhibit/program experiences. Survey Monkey is affordable (\$20 month), easy to use and best of all analyzes results. If only everything could be this easy!

Looking Ahead

Healthy Children, Healthy Communities has been instrumental in taking the museum to a new level, expanding its regional impact, creating a critical network of partners and providing an opportunity to reach many more children and families with its important health messages and resources. It has also helped expand our donor base, securing much-needed funds to support and grow museum operations. Now more than ever before, families, schools, organizations, hospitals, public officials and the media recognize the unique role Stepping Stones plays in the community. Project learnings are helping to guide the museum's future growth, which includes facility expansion, a traveling exhibit program and plans for several new exhibits.

Museum-wide Health Initiative in a Small Museum

Central Wisconsin Children's Museum Stevens Po int, Wisconsin

Tonya Kowalski, Executive Director

he Central Wisconsin Children's Museum (CWCM) has made health a museum-wide initiative. As a small museum (7,000 square feet) in a community of 30,000 people, it has managed to pack a lot of healthy power into everything it does. Being healthy is not just a popular trend, but a persistent core value that drives how this small museum is run.

Why health? As in many parts of the country, over the past five years there has been a big push in Wisconsin for health education for children, especially in light of the childhood obesity epidemic. CWCM has a longstanding relationship with the local medical clinic/hospital, the Ministry Medical Group. In a small town there are very few large, corporate donors; the hospital/clinic is one of them. A clinic doctor and the spouses of two other clinic physicians serve on the museum's board. These relationships help to foster and cement partnerships between the museum and the clinic. Typically, the clinic is a reliable donor to health-focused events or programs. Overall, the environment at CWCM has always been markedly health-based, resulting in the gradual development of a strong supportive network of hospitals, independent physicians, fitness centers, food cooperatives and local organic cafés—essential for starting a health initiative.

Healthy Programming

Health and wellness play a big role in all museum programming. Once a month the museum hosts a free evening event called Healthy Family Night (HFN). While visitors enjoy healthy snacks, special guests give health-related presentations that range from the importance of immunizations, to belly dancing, to having a family practitioner on hand to answer parents' questions. The program benefits different sectors of the community. It serves as a forum for people in the community to share their talents and knowledge with museum guests. It is a nice time for working families to visit, since the museum usually closes at 4:00 p.m. Several families come every month. One family brings the children's pajamas and at the end of the evening, changes the kids into their pajamas, takes them home and puts them right to bed. For many parents the hardest hours of the day are the ones leading up to bedtime. Healthy Family Night is a great way to get over that hump.

Summer programming is another example of the health-based environment at the CWCM. Hour-long summer workshops called Discovery Days focus on topics such as tae kwon do, knitting and fitness. In a Discovery Days session called Life's Little Obstacles, preschoolers navigate a pint-sized obstacle course while parents time their children with a stopwatch as they go through it—forwards and backwards. Activities include stepping through hula hoops on the ground (tire-agility style), crawling under a table, jumping over mini-hurdles and shooting balls into a small basketball hoop. Children have fun, but at the same time, it is great exercise. The museum hosts eighteen other workshops throughout the summer, many health-related, such as Fruitylicious, at which children make fruit pizza, fruit kabobs and



Tinkerbell delights in the Healthy Halloween Hoedown.

fruit smoothies. Fruitylicious gives children an opportunity to try new fruit, encouraging some of the pickiest eaters to try a healthy snack they made all by themselves. In Bodies in Motion, a yoga/stretching/resistance class, school-aged children learn simple yoga positions, how to use their own bodies as resistance, the benefits of pre- and post-exercise stretches and the importance of staying hydrated with water. All summer workshops are available for a small fee, and preregistration is required. The workshops are taught by staff members and community professionals who volunteer their time.

The museum weaves health issues into its monthly themes. January 2008 was Fit Families month during which the museum offered an active challenge: for every week of one hour or more of physical activity at home or at school, children put their names into

a drawing. At the end of the month, staff drew a name and the winner received a family membership to the museum. During the month visitors could test their skills at twenty-second timed "ski hops" (jumping back and forth across a line taped on the floor) and speed jump roping. Using stopwatches, kids tried to beat their best time of jumps per minute.

An annual February theme, Healthy Smiles, guides a month dedicated to dental health programming. A dentist comes to visit, children make their own toothpaste and all of the projects in the Art Room have a "tooth twist"—spatter painting with Overall, the environment at CWCM has always been strongly health-based, resulting in the gradual development of a strong supportive network of hospitals, independent physicians, fitness centers, food cooperatives and local organic cafés—essential for starting a health initiative. toothbrushes, making Tooth Fairy boxes or creating tooth brushing reminder charts. Statistics show that oral health is often ignored and affordable dental care is missing from many healthcare systems. Poor oral hygiene causes much more than cavities. Oral disease can even lead to death. By providing an entire month dedicated to dental health, CWCM contributes toward keeping its members, visitors and the community healthy and happily shouting, "Cheese!" (Hey, it's Wisconsin!)

Limiting Screen Time

The Central Wisconsin Children's Museum tries to keep its guests healthy and active by openly advocating little or no screen time—both at home and in the museum. Each year, CWCM celebrates National Turn Off TV Week (usually held sometime in

celebrates National Turn Off TV April) with special family activities. The museum gives journals to children so they can record what they do instead of watching TV every day for a week. When they return to the museum with a completed journal, they get a small reward such as a coupon for a free smoothie.

The museum has also eliminated screens entirely from the exhibit floor. CWCM has no exhibit touch screens and no computer learning stations. Museum leaders even voted down a Family Movie Night proposal because they felt so strongly about their no-screens policy. Between school and home children get enough (if not too much) screen time. The creative atmosphere provided by the museum fosters imaginative and active play and learning that cannot be duplicated in the electronic world. This philosophy also ensures that the museum will not be in direct competition with the public library, which offers free computer games and Internet use for children.

Healthy Programming

CWCM considers health and wellness in every aspect of museum operations—even finances. When planning a new fundraiser a few years ago, the fundraising committee came up with the idea of a Healthy Halloween Hoedown. Held on the Friday before Halloween and sponsored in part by a local medical clinic and a local fitness center that caters to



Every June the Central Wisconsin Children's Museum Kids Walk sends kids and their families on a one- or two-mile walk along the Wisconsin River that flows through the center of town.

The Central Wisconsin Children's Museum tries to keep its guests healthy and active by openly advocating little or no screen time—both at home and in the museum....The museum has also eliminated screens entirely from the exhibit floor. CWCM has no exhibit touch screens and no computer learning stations. Museum leaders even voted down a Family Movie Night proposal because they felt so strongly about their no-screens policy. Between school and home children get enough

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families, the event is a great alternative for families who are concerned with the safety of door-to-door trick-or-treating, or have little ones who wouldn't last too long going from house to house. The guests come in costume, enjoy nutritious food, do crafts and "dance off the candy" while a DJ plays fun, family-friendly party music. A community member brings his collection of live spiders and tarantulas. The museum purchases sub sandwiches, volunteers make wraps and every member of the board bakes or buys a healthy dessert like pumpkin bars or fruit muffins. The event brings in around 400 families, many of whom have made this an annual tradition, choosing the hoedown over conventional trick-or-treating.

Healthy Exhibits

Exhibits at CWCM also reflect a dedication to healthy activity.

The Wiggly Room, a permanent exhibit, is a large, open room outfitted with ride-on cars, hoppity balls, a slide and hula hoops. It is a space where children can run and skip and jump. From the hopscotch-printed carpet to the crawling tunnels, children have no problem staying active here.

The museum incorporates health-related traveling exhibits in its annual program. Mouth Power, a dental health exhibit from the National Museum of Dentistry, features an oversized mouth with giant floss and brushes to help children practice brushing and flossing, a full-size dental chair and lab coats so they can role-play dental visits as well as information about how portion size and exercise build healthy bodies. Healthier Ever After, a traveling exhibit from the Children's Museum of Cleveland, has a stretching station, a ten-foothigh castle that children can climb up and slide down and a Goodness Grove where children can make healthy food choices.

REPLICATION TIPS

BABY STEPS

Don't be afraid to do a little at a time. Add one nutrition or fitness program once a month or decide that one traveling exhibit each year will have a health component.

CWCM didn't set out to "launch" a health-based initiative, but given its existing relationship with Ministry Medical Group, museum staff slowly started to consider health and wellness when they took on any new partnership, exhibit or program. For example, the museum is located inside a mall. One year, the mall offered trick-or-treating. Children could go from store to store and get treats. CWCM agreed to participate, but instead of handing out candy, it handed out temporary tattoos, spider rings and tops.

The museum started consciously working health into as many areas as possible even while planning its expansion. CWCM has a *very* small staff—one full-time and seven part-time staff, many of whom only work three to four hours a week. Limited staff may seem like a challenge, but with such a small number, everyone gets to make nearly all of the decisions regarding the museum's direction. Working with a museum consultant, staff determined the museum's core ideas: 1) health and wellness, 2) cultural diversity, 3) the environment, 4) local flavor and 5) fine arts. With a museum expansion planned in the near future, staff wanted to establish the framework for how the new museum would operate and began incorporating what they could right away.

SIZE MATTERS

Create a healthy environment—with healthy programs to match—that will work with the resources your museum has.

It may be more difficult for a large museum that serves 2,000 people a day to do a program like a monthly Healthy Family Night and provide free snacks for all the attendees. But small scale has some advantages. CWCM, which averages 80-100 guests per day, can offer programs that larger museums cannot. CWCM learned to do what it could with what it had. The museum doesn't have the funds or the space to have a climbing wall or a large, active outdoor space, so it created a summer workshop called Au Naturel, where the kids take a nature hike along the Wisconsin River that flows right through the downtown and is about two blocks from the museum. The museum doesn't have the time or staff to host a big 5K walk with several training events leading up to it. But CWCM does have a Kids Walk every June in which more than 400 children choose a one-mile or two-mile walk to complete with their family along the same riverfront. It is a noncompetitive event, and everyone gets a medal.

BACK TO THE DRAWING BOARD

Be flexible and responsive to your audience's needs.

While learning how to do healthy practices well, the Central Wisconsin Children's Museum also learned what *not* to do. One lesson quickly learned was to plan different kinds of snacks in advance for their Healthy Family Nights. More and more children have food allergies and intolerances, so a menu of snacks—including the "safer" snacks like crackers and raisins—was planned a few weeks before the event. Then, if parents called to see what foods would be offered, the staff could respond immediately with the answers. This attention to health-related details demonstrates the museum's sensitivity to its audience needs and makes the event more enjoyable for all visitors. Nothing is more frustrating for a parent than showing up at an event where there is nothing that their child can eat, while other children around them have no such limitations.

Although adherence to the museum's core values was important, CWCM also learned flexibility. While the museum holds fast to its policy of no screen time on the museum floor, it did once rent a traveling exhibit that came with a section that included a touch screen. After much staff deliberation about whether the piece with the screen should be placed in storage or on the floor, they decided to put it out with the rest of the exhibit. Knowing that nothing is written in stone and allowing for a little leeway is always a good idea during the planning process.

SECRETS TO SUCCESS The power is in the people.

Creative staff, committee and board members are essential partners who continually think of ways to make programs, special events and fundraisers in a small museum rich with health and wellness. Everyone involved with the museum is dedicated to the health focus—both personally and professionally. Staff encourage each other to bike to work. They break for yoga stretches during long meetings. This dedication is vital when you take on a project such as a health and wellness initiative. You have to walk the talk: if the people you are working with do not view health and well-being as not only a museum value, but community necessity, you will not be able to accomplish everything you plan. Be sure to inform everyone involved with your health-related programs of the wonderful opportunity children's museums have to encourage and ensure healthy lifestyles throughout the community.

While riding the waves of trials and successes, strong funding partnerships and a dedicated staff have kept the "healthy boat" afloat at CWCM. Healthy Family Night is funded by the local hospital; the Healthy Halloween Hoedown and Kids Walk are both partially funded by the local clinic. A local dental insurance corporation covered the cost for the *Mouth Power* traveling exhibit. CWCM has discovered that most medical facilities want to promote health and wellness in the community, and a children's museum is the perfect venue for that promotion.

THE WILL TO CHANGE

The guiding hand behind all decisions is the institutional commitment to the health and well-being of everyone in its community.

When implementing a museum-wide health initiative, a museum will be forced to choose partnerships, events, programs and exhibits accordingly. This new outlook may involve eliminating or changing past activities. For example, a museum has hosted a popular—and lucrative—gingerbread house workshop every year in December where families come and make gingerbread houses with frosting, gumdrops and candies. After adopting a health initiative, the museum may decide to tweak that activity and use honey for the "glue" instead of frosting, organic fruit leather for windows and doors and sugar-free candies for the decorations. Making hard choices in the beginning will take some getting used to, but once begun, it becomes second nature.

A consistent focus on health has been an organizing discipline for the museum. But when the Central Wisconsin Children's Museum is faced with *any* new opportunity—program, exhibit, fundraiser, partnership, etc.—staff and board decide if it fits into one of its five focus areas. If it does not fit into a core aspect, such as health, the museum doesn't do it. Because of this diligence and commitment to the initiative, CWCM has become known in the community as a children's museum with a strong social conscience that continually provides quality play in healthy lives.

Starting Small: The Big ED Health Initiative

EdVenture Children's Museum Columbia, South Carolina

Katherine W. Williams, RN, DrPH, Health Education Programs Manager

he Big ED Health Initiative was developed to provide new education programs for families, teachers and schools at EdVenture Children's Museum and at its other community partner locations. Named after EDDIE[®], EdVenture's signature health exhibit, it is the third in a series of educational initiatives that began with safety education in 2003, followed by science education in 2005. With support from a two-year Institute of Museum and Library Services grant for \$148,739, matched with EdVenture funds of \$270,070, the Big ED Health Initiative was formed to address the issues inherent in the childhood obesity problem.

The Big ED Health Initiative is a two-year project aimed at increasing physical activity and encouraging eating healthy foods in the right amounts among museum audiences. The initiative's programs and activities have a simple but unifying central theme: all are focused on physical activity and nutrition in some way. The initiative did not launch fully formed, but instead grew incrementally, beginning with a kernel of an idea or a program that blossomed with support from staff and community partners.

The Institution and Its Environment

EdVenture Children's Museum began in 1993 as a grassroots organization. After five years of planning and three years of construction, EdVenture opened on November 8, 2003 in The Vista, a growing art, business and living area of Columbia, South Carolina. With eight permanent exhibits and two traveling exhibit galleries, EdVenture is designed to provide children ages zero to twelve with an engaging environment in which they can learn about the importance of healthy living, safety, environmental responsibility and gain the knowledge of different cultures.

Among its burgeoning roster of programs and activities, EdVenture's health initiative had a unifying central theme: all events and programs are focused on physical activity and nutrition in some way. The initiative did not launch fully formed, but instead grew incrementally, beginning with a kernel of an idea or a program that blossomed with support from staff and community partners.

Identification and Response to the Need

The population of Columbia, South Carolina, has a growing problem with poor nutrition and too little physical activity that has led to a rise in obesity among adults and children. Although EdVenture did not do a formal needs assessment prior to planning the Big ED Health Initiative, current state and national health statistics show the urgency of addressing this issue.

The initiative was designed to address a trio of key messages: eating healthy foods in the right amounts, increasing physical



Learning to eat healthy foods in the right amounts includes a sampling of South Carolina-grown watermelon.

activity and having fun while doing it. The challenge was to use museum resources to link families, schools and community partners to encourage positive change.

Research indicates that unilateral interventions at the individual, family or community levels alone have limited effects on rates of obesity. But multilateral, cooperative efforts at individual, family, community, corporate and governmental levels have potential for greater, more long-lasting change (Kaplan, Liverman, Kraak 2005). Since multiple factors contribute to a health problem, the Big ED Health Initiative works with the individual within the larger context of school, family and community. It strives to strike a balance among efforts directed at the individual and those directed at the socialenvironmental context in which people live.

Getting Started

The Big ED Health Initiative is a complex program. It includes CircusFit (a visit from Ringling Brothers clowns and acrobats), nature walks, kayaking, Be a Fool for Fitness (an April first-centered event), a bicycle safety rodeo, a sun and water safety celebration, a South Carolina produce-tasting event, a Carolina Panthers football training camp and the museum's own "EdLympics." It is not feasible to detail each component, so this article will focus on tracing the development of three programs in particular: the Great Parenting Series, Take a Heart and Smile and Big ED Health Team, all good examples of how a large initiative began with small but eventually interwoven steps.

The museum's Family Night has been an incubator for many EdVenture programs over the years. Well established, it is held on the second Tuesday of each month when the museum is open from 5:00-8:00 p.m. and admission is \$1.00 per person. Although attendance varies, visitors can number more than 1,000. It is a good slot in which to try out new ideas.

Using Family Night as a base, with an eye toward growing the Big ED Health Initiative, the next step was finding the right health partners. Once word got out that the museum was doing family health programming, groups in the community came to us. Some were a good fit; others, such as gyms interested in selling memberships, were not. One of the museum's partners, the American Heart Association (AHA), had presented hands-on programs on healthy eating and physical activity in which kids loved making (and eating) their own healthy snacks. AHA was an ideal Family Night partner: they provided everything needed for their programs and more importantly our missions and hands-on techniques were congruent. Through several partner programs, such as the one mentioned above, the Big ED Health Team began to coalesce at Family Night. The plan for the team was to invite families to participate in health programming and activities at the museum on a regular basis. New signage announced that the Big ED Health Team was meeting on Family Night. Although there was no formal "meeting" this signage served as a conversation starter for recruiting participants for the upcoming Big ED Health Team events, planned for twelve weeks in March-May of 2008.

The Development Process: Building a Team

As plans for specific Big ED Health Team events got underway, the larger initiative also built steam. One of the first steps in the planning process was to invite potential community partners to serve on an external advisory committee. Members were recruited because they possessed expert knowledge of the issues, had developed related or complementary programs or because of their gatekeeper roles in organizations that could provide facilities, connect key personnel or access important information

networks. The steering committee grew

to include dentists, pediatricians and other physicians, city officials, the manager of the city's Wellness Center, program managers from state and federal health and education agencies, a representative from the State Fire Marshal's Office, representatives from the South Carolina educational television network, leaders from private service organizations, the First Lady of the University of South Carolina (also a nutritionist) and professors and administrators from the University of South Carolina.

The Big ED Health Initiative would not have occurred without the committee's active participation in all levels of planning and execution. They not only provided oversight and ideas, but they also identified and assigned members for subcommittees that planned and executed the programs of the health initiative. The steering committee continues to meet quarterly to share ideas and resources and to give feedback on how the programs have functioned. This part of the initiative has worked well with few problems other than those inherent in convening a group of busy individuals.

The Great Parenting Series, health-focused lectures for parents, is an example of how the initiative's subcommittee process worked.



A young boy gets a chance to work on his speed and agility at EdVenture's Carolina Panthers football training camp.

Research indicates that unilateral interventions at the individual, family or community levels alone have limited effects on rates of obesity. But multilateral, cooperative efforts at individual, family, community, corporate and governmental levels have potential for greater, more long-lasting change (Kaplan, Liverman, Kraak 2005). Since multiple factors contribute to a health problem, the Big ED Health Initiative works with the individual within the larger context of school, family and community. It strives to strike a balance among efforts directed at the individual and those directed to the social-environmental context in which people live.

EdVenture staff conducted a survey at two Family Night programs to find out what topics most interested parents. The subcommittee then took these ideas and found experts from their organizations and networks to speak on selected topics including: respectful discipline, picky eaters, parental roles in obesity prevention, children's medications and raising emotionally healthy children. To start the meetings, a fitness expert from the local YMCA led the group in exercises that could later be done together by children and adults. The museum received excellent feedback from the participants, but the Great Parenting Series was a wonderful example of a great program that very few people actually attended: attendance ranged between two and ten participants. The steering committee was then helpful in brainstorming ways to increase attendance, such as holding the lectures as part of a neighborhood association, PTO or corporate meeting with a ready-made audience.

In addition to committee members, Big ED Health Initiative partners worked on special emphasis months such as Take Heart and Smile Month (February), which united the efforts of the EdVenture staff, the SC Dental Association, SC DHEC's Oral Health Division,

Clemson University Extension Agency, The Junior League of Columbia, The American Heart Association (AHA) and Providence Hospital, a local cardiac hospital. Each partner provided programmatic expertise in their areas. Dentists from the SC Dental Association provided free dental health screenings (439 children screened) and donated more than 5,000 toothbrushes that were given to visitors and local schools with large numbers of at-risk children. SC DHEC provided oral health education but could not provide a dentist for screening. Without the private pediatric dentists who served on our committee the screening would not have occurred. Volunteer dentists who have closed their practices for the day in order to screen children want to see lots of children. Arranging the screenings for the month of February and the details of getting parental permission, scheduling, moving large numbers through the dental screening process and making the wait time educational for school groups was a complicated process that required additional museum staff time. The museum/dental partnership ultimately provided screenings for a large number of children who otherwise may not have had access to oral health care, but this part of the initiative required at least one dedicated museum staff member with health/ medical skills.

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Big events clustered on two weekends in February. SC DHEC Oral Health Division commissioned a marionette puppet show; the American Heart Association's heart-costumed character greeted children at the door, and AHA representatives made heart-healthy snacks with visitors. The Clemson University Extension Agency lent their healthy fruits and vegetable costumes, which were worn by EdVenture staff members. The Junior League used a Family Night to do a "Done in A Day" program in which children created healthy recipe boxes while a physician demonstrated the anatomy of a cow's heart to fascinated adults and children. Publicity for these events was a shared task. February events were publicized through EdVenture's newsletter and Web site, the SC After-School Alliance Web site, state and city dental associations' newsletters, two newspaper articles and four newspaper advertisements.

The first year of the Big ED Health Initiative required a lot of work from staff, partners and volunteers. The partners who remained on the steering committee throughout that period remained interested in the initiative's second year.

Lessons Learned the First Year Aid in Planning the Second

Program evaluations, including a midpoint evaluation, were used to inform and direct the planning for the second year. Through scholarships provided by the Junior League's Smart Matters program, new audiences joined the Big ED Health Team. Smart Matters provides information and academic opportunities for low income families in public schools. EdVenture staff members visited monthly Smart Matters dinner meetings to recruit team members, most of whom came to the Kickoff Event with Slim Goodbody but unfortunately did not continue regular participation. Language and transportation barriers were challenging, but qualitative data indicated that those who did participate enjoyed the activities, learned about fitness and nutrition and planned to sign up again. Respondents had constructive criticism, too; some of their requests were more events geared to learning about other ethnicities, sleepovers, guided historic/nature walks, water sports and better marketing with publication of the event schedule earlier in the year.

Staff learned some lessons about streamlining operations in the production of a health and wellness program. For instance, each Big ED Health Team member was given a laminated card worn on a lanyard around the neck and a fitness journal to keep track of their fitness goals. Laminating a thousand cards was much more time-consuming than estimated. Many journals were lost or never picked up so stamping them when they attended each of the events did not work. On the other hand, information packets and giveaways (e.g. pedometers) were very successful. Initiative partners provided the giveaway items and health literature. Staff learned valuable lessons about keeping attendance records: event check-in went more smoothly when we had two lists-chronologically by team number and alphabetically by family name. Check-in and a sense of community improved when the same staff members were present at most of the events. Staff soon recognized team members and greeted them by name. It is too soon to know how these refined practices will affect other EdVenture programs and practices in the future or how they have changed the perception of the museum in the community. We do know that the people who participated in the Big ED Health Team twelve-week wellness program are excited about fitness and nutrition and looking forward to next year's Big ED Health Team events.

REPLICATION TIPS

START SMALL AND BUILD

The Big ED Health Initiative is a large, multifaceted program that spans two years. It is replicable for a range of types and sizes of museums because it was built incrementally with a lot of small programs that gained momentum over time.

Start with one part and watch it grow. Take Heart and Smile began as a one-day event and eventually spanned the entire month of February, now titled Take Heart and Smile Month. Family Night, a successful existing program, was a good venue for trying out new content because of its built-in diverse audience. If you have an idea for a health program, try it out in a well established time and program slot on a smaller scale. How it works—or doesn't work—will provide valuable information for planning future events.

FIND THE RIGHT PARTNERS

Even with smaller scale projects, seek community partners who share an interest in your health message. The more partners that participate successfully, the more they encourage others to do the same. If a potential partner does not immediately get excited about the program, let them participate in a smaller way and invite them again when the museum hosts a different type of health event. The group that was uninterested when first invited may develop more interest later on in the process.

Recruiting community partners for health programs can start with partners who have participated in other programs. Many of the agencies such as the American Heart Association and the SC Dental Association had a history with EdVenture that provided connections and established working relationships. Who already likes to work with your museum? Who are their friends and partners? Invite them to participate at whatever level of involvement they prefer.

ASSIGN STAFF BUT... ...BE REALISTIC ABOUT TIME COMMITMENT

EdVenture staff recognized the importance of health education and the potential of a children's museum to be an effective educational partner in the community. In developing the health initiative, the museum hired a dedicated staff member for health programs. Smaller museums may not be able to do this, and so must distribute the workload to allow staff time for development and delivery of the health programs. Keep in mind that recruiting and working with the community partners also takes time.

DEVELOP A MARKETING/RECRUITING PLAN

Developing a marketing plan should be done early in the planning stages. Although the Big ED Health Initiative had great support from the museum's marketing department, publicity and recruitment should have started even earlier. Recruiting participants, getting them enrolled, informed and ready to participate in the Big ED Health Team, for example, took more time and staff energy than we had expected.

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Health Outreach Programs Lead the VVay

Creative Discovery Museum Chattanooga, Tennessee

Lynne Mulligan, Programs Manager

reative Discovery Museum (CDM) received a grant from the Institute of Museum and Library Services to launch a school outreach program in 2004 to expand the museum's educational services and better serve the needs of local schools by teaching students as well as modeling best teaching practices for teachers. Called the Museum-a-Go-Go Outreach Program, in the 2007-2008 school year it introduced two new lessons that focus on living healthy lives and making nutritious food choices. They dovetail nicely with the museum's health initiative, launched in 2008, and enable CDM to extend that initiative directly into the classroom.

The Museum and Its Focus on Health Education

Creative Discovery Museum is located in revitalized downtown Chattanooga, Tennessee. Since its opening in May of 1995 more than two million people have visited. CDM's primary purpose is to be a hands-on children's museum that provides educational programs and exhibits in the arts and sciences.

The museum is recognized as a vital educational resource and collaborates with more than forty different community partners providing a variety of educational programs. In 2005 a strategic planning process indicated that the museum could play an important role in health education by promoting healthier lifestyles for children and families. In response, CDM formed a Health Task Force that included a pediatrician, two board members involved in the health insurance industry, the director of the health department, the director of T.C. Thompson Children's Hospital, a professor of nursing at Chattanooga State, the YMCA's youth fitness director, the executive director of the medical society and staff from the museum's education department.

The task force recommended that the museum's health initiative focus on three themes: healthy foods (diet), healthy play (physical activity) and healthy bodies (how the body works). The emphasis on healthy foods and physical activity would complement the county school's new curriculum, the Step One Health initiative. It aligned with the task force health providers' educational goals. A survey of the museum's teacher advisory board and pediatric nurse focus groups confirmed the need for educational programs focusing on diet and exercise. CDM's health education initiative would also fill a void created when Health House, a nonprofit health education organization, went out of business in early 2000.

The task force recommended the following components for the health initiative.

• **Small permanent exhibit:** Since the museum does not have space for a major health exhibit, a small, permanent exhibit space will be dedicated to a changing menu of different health issues. In May 2008, the museum opened the *Corner Clinic*, a small doctor's corner exhibit, funded by a \$25,000 grant from the Medical Alliance of Chattanooga.

• School outreach programs: Two new school outreach pro-



Piecing together a skeleton puzzle helps kids understand how their bodies work.

grams—Healthy You, Healthy Me (focusing on how the body works) and From Seed to Table (exploring how foods grow and what constitutes a healthy diet)—were added to the museum's existing roster. Funded with a \$3,000 grant from BlueCross BlueShield of Tennessee, their design and replication possibilities are the focus of this article.

• Healthy messages throughout the museum: The museum has introduced healthier choices in its café and has purchased a special refrigerated display unit to display fruits and salads.

• Promotion of healthy lifestyles as part of the museum's corporate culture.

• Participation in the Association of Children's Museums' Good to Grow! health initiative self-study process.

Investing in School Outreach

CDM's outreach program has become a huge success, growing from 3,000 students in its first year to close to 20,000 students in the 2007-2008 school year. The growth in this program is due to many factors. As gas prices increase, teachers are often severely limited in the number of field trips they can take. CDM's "in-house field trips" fill that void and are taught by experienced classroom teachers who

demonstrate enthusiasm, creativity, classroom management skills and deep knowledge of the subject matter. Classroom teachers know that by booking these programs they are getting top notch instruction for their students as well as an opportunity to observe best teaching practices in action. Outreach program lessons are closely correlated to state learning standards that must be covered during the school year: the material presented extends and expands on content present in the classroom curriculum. Teacher evaluations have shown that teachers can

Creative Discovery Museum is entering a new era where healthy lifestyles and healthy kids are an important focus. These outreach lessons have done an excellent job of paving the way toward expansion of health-themed content museum-wide and increasing the museum's role in contributing to the good health of the Chattanooga community. achieve a better understanding of "hard to teach" grademarkers after an outreach lesson is presented. They identify activities associated with constructivist teaching and indicate that they plan to use these activities as they teach other content. After experiencing an outreach lesson, students also report a correct understanding of a concept previously not understood. The outreach lessons of Healthy Me, Healthy You and the From Seed to Table series, along with the other elements of the museum's health initiative, have made the museum a major resource for health education in the region. In the process, the museum has established new relationships with health professionals and expanded its capacity to influence and encourage healthy lifestyles of children and families throughout the region.

Healthy Me, Healthy You

Healthy Me, Healthy You, an hour-long health and wellness program for students in kindergarten through third grade, is part discussion, part activity. In large groups, children talk about the importance of health and what's involved in staying healthy, including simple daily hygiene activities such as hair-combing, washing and teeth-brushing. They learn about their bodies—what holds bones together, what organs are contained within the skeleton and what their functions are. Learning about how a nutritious diet contributes to overall health, students talk about their favorite foods and how they would choose foods based on food pyramid recommendations. First aid techniques—the importance of cleaning a wound, how to stop bleeding and the necessity of telling parents about injury—round out the content.

Program activities allow kids to put together skeletal system puzzles, use stethoscopes to hear how their heart beat changes after exercise and examine how their lungs really work as they "see" and feel a pulse. Making healthy food choices that are good to eat and meet the recommended nutritional guidelines for a day's nutrients go home with them in the form of a necklace of healthy food symbols. Children wash their hands and hold them under a special light to see if they missed any of the "germs" and learn proper tooth brushing with a large set of teeth and a giant toothbrush.

The lesson culminates in a series of questions such as What will you do to help improve your health? or Can you name one system of the body and what it does for you? These questions attempt to capture the information learned that day and reinforce the ideas presented in the lesson.

From Seed to Table

A second new health-focused outreach program, From Seed to Table, is a series of three seasonal (fall, winter, spring) lessons for students in kindergarten through fifth grade. Classes are encouraged to complete all three lessons since each is based on the sequential seasonal growing cycle of plants. Student learn about the parts of plants, what plants need to grow, how we use and reuse them and what time of year they grow. Children prepare the soil, plant seeds, grow plants, play learning games, follow recipes using herbs and vegetables and prepare and taste different foods. They also create art projects based on botanical materials such as leaves, nuts and seeds. The ever-present value of eating nutritious foods to keep our bodies healthy is not overlooked.

The fall lesson begins with the reading of the illustrated book *Pumpkin, Pumpkin* by Jeannie Titherington. Students examine the

pumpkin's life cycle from seed to food and back again. They learn that pumpkins are vegetables (and that we need to have five servings of vegetables each day). Activity stations feature hands-on experiences with all parts of the pumpkin, including seeds that have been soaked over night and cracked open to reveal the tiny plant embryo inside. Students estimate the pumpkin's weight and the circumference of a pumpkin by cutting yarn to the length, then compare their estimate to the actual tape-measured number. They even plant a pumpkin seed in a Ziploc[®] bag with a little dirt and water and keep the bags in the classroom where they watch how the seeds open, the roots grow down and the sprout grows up. The final activity? Making a quick pumpkin pie, of course!

The winter From Seed to Table lesson focuses on trees and leaves including the effect of temperature on growing seasons and different types of leaves from evergreen to deciduous. Where the seed will develop on the plant or tree in the spring, what parts of the plant we eat and how much we need to eat to meet the recommended daily amount for fruits and vegetables, compared to standard foods like cheese or cereal, are considered. Students match leaves to the tree or plant from which they came, make leaf rubbing plates or use actual leaves and crayons to create collages, recording the type of leaves used. Activities culminate in a winter leaf-based recipe: a salad with leaves, stems and edible flowers.

Paralleling nature, the spring From Seed to Table lesson comes alive with a discussion about the same plant parts that were presented in the previous two lessons and how they are changing this season. How does fruit come from the seed in the flower that has been pollinated by birds, bees, butterflies or wind? How is pollen carried from one flower to another? How does the pollinator put the pollen in the right place so it can make a new seed where more fruit can develop? Students talk about what kinds of fruit they like, learn about their mineral and vitamin qualities and how each colored fruit is good for different parts of the body. The edible final lesson is easy: students make their own fruit salad and use a juicer to make juice from fresh fruit such as oranges and lemons.

As a grand finale, classes who participated in all three lessons are invited to a festival at the museum's partner institution for this lesson series, Crabtree Farms, an urban and community garden located in Chattanooga. During this closing celebration, students explore the gardens and greenhouses and see how the plants and food they have studied are grown. The schools pay for the class series, and the only cost for students for the From Seed to Table festival is transportation to the farm.

Early Development Decisions

Healthy Me, Healthy You grew out of requests from local teachers who needed help in delivering healthy living messages to their students. Museum educators met with the local school system's health coordinator to make sure the lessons were developed in a way that met the needs of both teachers and students. Following requirements established by state learning standards, the focus of this lesson became an overview of healthy living practices.

In developing the From Seed to Table series, the museum collaborated with Crabtree Farms, a local research and education nonprofit that promotes sustainable agriculture. The organization hosts numerous events and programs that allow the community to participate in the seasonal growth of the farm: a farm stand, gardening workshops, a community garden and farmer-for-a-day classes. Crabtree Farms' mission—educating children about healthy practices—matches closely with that of the museum. The partnership has strengthened the museum's ability to provide these important lessons. Initially the museum hoped to implement a year-round four-lesson series aligning with the four seasons, but because of the schools' time and budget constraints, it was decided to develop three lessons limited to the fall, winter and spring seasons.

Evaluation: What We've Learned

The museum's school outreach program is supported by a strong evaluation component. A teacher task force meets prior to lesson planning and gives input and advice on suitable topics and standards to cover. Classroom teachers are given surveys to fill out after the lessons have taken place. The lessons and educators teaching the lessons also are observed and evaluated at the schools by the museum's school coordinator



Donning organ aprons in Healthy Me, Healthy You, kids learn what's inside their bodies and how it all works.

Museum staff, with input from local health experts, built on their history of trust and acknowledged expertise in working with teachers and students to develop programs that would be successful in local schools. Exhibits, lessons and programs, developed with that outside and distinctive museum voice, help children learn more—and in a fun way—about the importance of a healthy lifestyle that is the result of good food choices and taking care of their bodies through exercise and healthy habits.

by the museum's school coordinator and programs manager.

Comments received from teachers following museum outreach lessons were generally very positive. Healthy Me, Healthy You was presented to 1,450 students during fifty-four outreach lessons. The presenter's knowledge of the subject received the highest marks. Teachers stated that lessons matched well with curriculum objectives for their grade level in life science. They reported that their students enjoyed the lessons and discovered new knowledge through interactive involvement.

From Seed to Table was presented to 1,730 students during sixtyfour outreach sessions. Evaluations collected from the presentations revealed that the teachers were pleased with the lessons. One comment was: "I like the way the students rotated from activity to activity. I will try to use that type of rotation in science class more often."

REPLICATION TIPS

START SMALL

Creative Discovery Museum has had great success in partnering with schools by starting small with six schools and really getting to know the teachers there. Surveys revealed teachers' needs. Observations conducted in classrooms by the outreach manager gave museum staff an idea of what was already happening there and what methods of instruction were being used. Teachers were invited to join focus groups to discuss how the museum might best help them and their students. Pilot lessons were taught in local schools and subsequent recommendations made by teachers were taken into account when improving the lessons. The museum made a point of developing strong relationships with teachers and schools. Programs were based on education standards and were designed to instruct, inform and entertain the teachers and students. Museum staff, with input from local health experts, built on their expertise and history of trust in working with teachers and students to develop healthy lifestyle programs that would be successful in local schools. Exhibits, lessons and programs, developed with a distinctive museum voice, help children learn more—and in a fun way—about the importance of a healthy lifestyle that is the result of good food choices and taking care of their bodies through exercise and healthy habits.

THINK BIG

Although sometimes it seems as though healthy lifestyle concepts are over-repeated, the need to broadcast these basic essential health messages remains strong. CDM continues to expand its involvement in delivering health messages by developing *Good for You*, a 2,000-square-foot health and wellness exhibit based on a picture book to be written and printed in conjunction with the exhibit. The major goal of the exhibit and

its companion book is to promote healthy lifestyles for children and families. By presenting an immersive environment where children and their families can investigate healthy food choices and options for physical activities, the exhibit will help visitors to recognize that a healthy lifestyle is the result of good food choices and active play. The exhibit, which opened in January 2009, will become the museum's fall/winter exhibit for a three-to-four-month period each year.

The outreach coordinator continues to communicate closely with the group of teachers who participated in the From Seed to Table outreach lessons, identifying strengths and weaknesses so that the museum can continue to improve upon the program for coming school years. Educators at Crabtree Farms are also working on ways to make the end-of-the-year festival a more meaningful experience for students and teachers alike. Teachers and students enjoyed the "cooking" parts of the lessons where they got to make salad or squeeze oranges to make juice, and they liked planting the seeds and learning about the parts of the plant. These activities coordinated well with the educational standards. Teachers did express a desire to have more hands-on activities during farm day and fewer discussions or presentations. As a result, new "make and take" type activities using plants and seeds will be added.

Creative Discovery Museum is entering a new era where healthy lifestyles and healthy kids are an important focus. These outreach lessons have done an excellent job of paving the way toward expansion of health-themed content museum-wide and increasing the museum's role in contributing to the good health of the Chattanooga community.

Small Steps Lead to Big Changes

Children's Discovery Museum of San Jose San Jose, California

Linda M. Fischetti, Manager, Education and Programs

s part of its commitment to fostering creative play and learning, Children's Discovery Museum of San Jose (CDM) has become increasingly concerned with children's current indoor, sedentary lifestyle. As many children have lost access to the kinds of lively, outdoor play so important to intellectual and emotional wellbeing, serious negative consequences for their *physical* well-being are beginning to surface.

The museum's 50,000-square-foot facility in downtown San Jose serves more than 300,000 children, families and teachers annually. Exhibit galleries are geared towards kids ages zero to ten; youth programs target young people through age sixteen. CDM's highly diverse neighborhood offers unusual challenges and possibilities (San Jose has no ethnic majority, more than 144 languages are spoken and one in five children lives in poverty). Sustained outreach efforts have resulted in an audience that reflects local demographics and represents its varied customs, traditions and daily life choices.

Based on the sobering information about the state of children's health in the community, the museum resolved to try to help reverse current destructive trends. By leveraging our unique ability to reach adults and children and by putting fun into learning, the museum hopes to inspire lifestyle changes among the community's diverse families. In 2003 CDM took the first small steps in an effort that eventually developed into a museum-wide health initiative that includes wellness weekends, healthy eating messaging, new exhibits and programs and institutional change: Kick Start, Eat Smart.

We did not build a whole new wing, mount a major new exhibit or develop large-scale programs. We began by looking at what we were already doing to see how small changes and new partnerships could help promote children's health to our visitors and our community. We combed through existing exhibits, programs and practices to find ways to retool them with healthy messages. Some efforts have

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been very successful; a few died on the vine. Five years later, the process continues.

The first venture was a wellness weekend during which we focused on the physical activity already inherent in a visit to our highly interactive museum: walking around a large space, climbing the grand staircase and interacting with specific exhibits that use gross motor skills. Called Circuit Training, activity was encouraged by providing simple messages on various exhibits such as, "Getting the balls to the top uses ten calories." In addition, all museum guests-adults and children-were given pedometers to track their steps during their stay. As visitors exited, staff checked their pedometers and ceremoniously added these numbers to our "total



The farmer's market features a model-T, refitted as an old pickup with crates of "fruits and veggies," ingredients used in pizza building.

board." Visitors were encouraged to keep using the pedometers and stay active. But, you will find as you read further that much of what we tried this first weekend proved unsuccessful.

With a heightened wellness sensitivity, key staff became intrigued by Kaiser Permanente's Thrive campaign that featured a series of public messages mirroring the museum's new interests. Several years ago, Kaiser had rolled out a new approach to healthcare that emphasized prevention. They invested millions of advertising dollars on wellness messages on television and radio and actively promoted healthy activities at community events.

CDM education and marketing staff brainstormed ideas for communicating some simple, easy-to-do "how to" messages about healthy eating and active living that would be appropriate across the age groups and cultures often found in the museum. We shared these ideas with Kaiser Permanente staff. They were interested in working with us. Incorporating their feedback and tapping into their existing resources, including their educational theater program for schools and printed materials, together we developed a series of pilot wellness weekends called Kick Start, Eat Smart.

As Kick Start evolved, mini-partnerships and in-house programs came together in a series of health-themed weekends, co-sponsored by Kaiser Permanente. We kept experimenting with ways to communicate our messages. At various times, the museum featured the following:

• local teachers of Jazzercise and Yoga for kids, and other movement programs including dance and cheerleading, in twenty-minute mini-workshops for families;

• a Pee-Wee Mariachi program for parents and kids who wanted to participate in simple group dances to lively Mexican music (codeveloped with the local Mexican Heritage Association);

• pedometer distribution, with a request that folks track their steps inside the museum and beyond, and the opportunity to add their day's steps to the giant counter at the front door (low-tech but impressive, the total was adjusted by a volunteer who flipped large number cards);

• local university nutrition students, wearing fruit and vegetable costumes, on-hand to answer questions;

• live presentations of Kaiser's health-themed outreach drama, part of their Educational Theatre Program;

• an informational table manned by Junior League volunteers promoting "A Soda-Free Summer";

 live music by children's bands that invited child "mosh pits" at their performances; • informational signage on calorie-burning museum exhibits;

• representatives from the local Farmers' Market Association who shared literature, provided tastings of fruit and vegetables and facilitated a healthy snack activity, with the message of "Eat a Rainbow Every Day."

Now here was a healthy eating message that captured our imaginations: it featured a rainbow, a colorful, popular image familiar to children; it was playful; and it was simple to remember and incorporate into daily life. Although we had tested the waters with a number of other nutrition messages, so far nothing stuck. Helping kids understand calorie counts for certain foods and how many calories are burned by certain activities proved difficult to communicate to our mixed-age audience. Encouraging eating five servings of fruits and vegetables per day was hard to successfully translate into an interactive exhibit for kids and their parents. The more we thought about it, the rainbow was the way to go.

On-board sponsor Kaiser Permanente was also excited by the rainbow concept. Kaiser nutritionists worked with the museum to develop ideas that might successfully help families achieve three healthy nutrition goals:

1) think and talk about the range of fruits and veggies that they might choose;

2) understand why each color should be included for health; and

3) learn playful, healthy recipes.

With children's health and the new Eat a Rainbow goals clearly in mind, we looked at existing exhibits with new eyes. An 800-square-foot interactive pizza parlor exhibit in need of a face-lift (or removal) and a model-T that no longer belonged in a renovated gallery gave birth to the idea for a Rainbow Pizza and Farmers' Market. The former Pizza, Please pizza-making space was inexpensively upgraded to incorporate the following: a country house façade (recycled from another exhibit) that included a pantrysorting space (foods sorted by color); a farmer's market featuring our model-T, refitted as an old pickup with crates of "fruits and veggies"; a pizza preparation area with lots of "ingredients" for pizza building; and places for adults to sit and pretend to eat the pizzas made and served by the kids.

Rainbows and brightly colored produce dominate the exhibit graphics; very little copy is needed to convey important ideas. *Rainbow Pizza* offers beautiful plastic-jacketed menus in three languages (English, Spanish and Vietnamese) aimed at adults as well as children. They feature bright photos and simple statements ("Yellow foods support healthy vision"). Featured pizzas for "patrons" to order from young pizza chefs include the Picture Pizza ("Our rainbow-colored



A young chef assembles his favorite pizza using healthy ingredients available from the nearby Farmers' Market.

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ingredients are the 'paint' we'll use to create a work of art"). The menu includes an Eat a Rainbow at Home sheet, targeted to adults waiting for their pizza to "cook." It incorporates tips such as Stealth Sauce ("Having a hard time getting vegetables behind enemy lines? Try this secret formula: tomato sauce + veggies + blender = a healthy vegetable invasion.") The enticing graphics also show up on placemats, signage and brightly colored tables that each focus on a color and feature vegetables in that palette.

Rainbow Pizza is very popular with visitors. It is always lively and bustling as pizza "chefs" tote their creations to waiting adults. One day Kaiser Permanente representatives came by to observe the excitement first-hand. The team was seated at the purple table with its Chinese eggplant graphic when a child delivered a pizza to them, piled high with broccoli and tomato slices. A Kaiser staff member asked the child if he liked broccoli, and he replied, "I love it!!"

REPLICATION TIPS

ADD A SIMPLE NEW COMPONENT ...and review existing components with fresh eyes

Elements of the Kick Start, Eat Smart initiative, particularly the Eat a Rainbow Every Day nutrition messaging component, lend themselves quite nicely to replication. The idea of eating a rainbow is so simple that it can be presented in many ways, for different audiences, on a large or small scale. Sorting activities are a natural, and health benefits can be reinforced by simple color messages on sorting receptacles, such as "Red foods can protect the heart." Shopping and meal preparation activities require simple props: plastic foods, shopping bags or baskets, plates, pizza shells, etc. in addition to color-coded bins for "purchasing" and then "putting away." Provide items familiar to your audience when possible, as well as choices that may be new to them, and provide information in all appropriate languages.

Look for partners and opportunities within your community. CDM worked with the Farmers' Market Association and Kaiser Permanente; both were sources of materials and information, as were students at local colleges. We asked local teachers of physical movement, exercise and dance to come for an hour and provide two twenty-minute workshops for a \$50 honorarium.

Look at what you are already doing through rainbow-colored glasses—some exciting possibilities may appear!

TRIAL AND ERROR(S)

The evolution of CDM's health initiative was not without its challenges. Learn from some of the realities we encountered. • Arriving at the Eat a Rainbow approach took more than two years.

• The Farmers' Market wasn't accustomed to working with children and families in an informal setting. In their school program, groups of children completed a color-related food activity at a table, then moved together to another table to work with a different color, and so on. They introduced a "healthy snack" through a demonstration. Neither of these scenarios worked in the museum, so we worked closely with them to re-focus their standard offerings and make them CDM-appropriate. It was time-consuming, but worth it. We eventually turned the color-table idea into a successful sort-by-color activity and found recipes for healthy snacks that kids could do entirely on their own.

• Kaiser Permanente's drama program was aimed at older children in a school setting and was inappropriate for our audience. The play was too long and covered a number of health issues, including smoking. We helped them cut it down to about twenty-five minutes that focused exclusively on healthy eating.

• It is difficult to offer many ethnic fruits and vegetables—bok choy, jicama, jalapenos and long beans—in *Rainbow Pizza* since they don't sell many in plastic versions! We included these items when possible and feature others in the exhibit graphics. The real Farmers' Market visits proved to be a great way to highlight these foods, complete with tasting opportunities.

· One very unsuccessful approach to promoting activity, in which we invested a lot of energy, was Circuit Training, mentioned earlier, where we identified exhibits and architectural features, such as the staircase, that provided substantial physical activity. Signage encouraged visitors to use them to "work out" and record their activity on an "Action Tracker." None of this worked. The Circuit Training messaging was layered over the original exhibit content. Most people didn't understand or even notice the Circuit Training option. It was largely ignored. Then we developed a passport and stamping activity. Visitors could receive a stamp at each Circuit Training station and bring their completed passport to the retail store to receive a prize. That didn't work either. The stamping activity became more exciting than completing the Circuit Training! Many visitors collected stamps without completing any physical activity. After two years of trying to get this all to work, we dropped it altogether and allowed the exhibits to serve their original purpose, free of confusing, graftedon messages.

Focus on Health: Start Small and Grow into It

Despite ups and downs, we still believed strongly in the importance of this issue and in the museum's ability to be an effective agent of change among our audiences. We persevered, and now the themes of healthy eating and activity infiltrate everything we do. Although we began with small changes to existing programs and exhibits, the philosophy has taken root and permeates every new idea.

Exhibit design: We are trying to layer in more physical activity with every new exhibit we build. For example, we are retrofitting a Cyclo (Vietnamese Pedy cab) in one of our exhibits to encourage pedaling and to be particularly engaging to adults who grew up in Vietnam.

Out on a Limb, a new exhibit designed to encourage outdoor exploration and nature play, inspires children and their caregivers to learn to investigate nature by using their senses. More than simply

seeing the beauty of a tree, visitors hear the sounds of the forest, use leaves to make beautiful art and build structures from bark and limbs. The 1,200-square-foot imaginative, sculptural, interactive environment incorporates nostalgic settings such as a treehouse and a fort-building area to invite cross-generational play. Its whimsical atmosphere is created in part by children's nature-themed artwork that makes up the faux bark and leaf canopy of the centerpiece tree. Individual exhibit components—Whirlwind, Light Play, Forest Jam and Gnome Home—further enhance the magical scenery and encourage exploration, providing practice with the physical skills of climbing and balancing, which helps children to develop self-confidence in outdoor play.

Kick Start, Eat Smart weekends: Out on a Limb and Eat a Rainbow programs drive four health-themed weekends annually. "Take the Eat a Rainbow Everyday Pledge" invites visitors to fulfill one of several simple nutrition tasks and offers character Trading Cards as incentives. Each card includes a kid-friendly recipe on the back. Kaiser uses the Pledge system at community events as well, and results have been promising.

Art Loft: Several visual art projects have been developed around the nutrition theme, from creating large paper-mâché fruits and vegetables for a Giant's Table to creating art on paper plates representing favorite rainbow foods.

Amphitheatre: A lunchtime concert series invites visitors outside ("Bring your healthy lunch"). Dancing is encouraged.

Theater: A drop-in dance workshop in the theater promotes movement to the sights and sounds of world music and photos.

Café: The café has revised its menu and practices and has even offered one of the healthy pizza choices described in the exhibit. They have eliminated trans fats and replaced ICEEs (corn-syrup-sweetened slushee-type drinks) with frozen juice drinks. A self-serve refrigerator offers fresh salads and seasonal fruit cups. New recycling practices include compostable plates, serviceware and cups.

Kids' Garden: We planted a "pizza bed" in our existing outdoor garden with many of the food items in the *Rainbow Pizza* exhibit and have cross-referenced the two spaces. Children plant, weed, water and harvest their own vegetables. Gardening has taken on an increased importance recently. With the escalating cost of food, city folks are looking to CDM to understand container gardening. A garden specialist is on hand to answer questions.

For staff: We installed bike racks for staff to encourage riding to work. We try to provide healthy snacks for afterschool programs and business meetings.

Outreach: We co-facilitate booths with Kaiser Permanente at many major community events that highlight our joint partnership. This effort has enabled us to reach a far greater audience.

There is a lot going on, but things came on-line one at a time as ideas were prototyped, partnerships developed and successes assessed. The museum continues to look at everything we are already doing to see if any tweaking will help better promote the message of children's health to our visitors and our community. We hope that some of our re-alignments will inspire small changes in your museum—small changes that can lead to big changes in museum operations.

institutional commitment Museum practices that cultivate healthy habits among staff

Out on the Range

Museum of Life and Science Durham, North Carolina

Shawntel Landavazo, Senior Director of Guest and School Experiences

he Museum of Life and Science (MLS) has added "legs" to the two Good to Grow! messages of *getting plenty of exercise* and *connecting with nature* to promote healthy living in the workplace. The addition of ten acres of new outdoor attractions offers visitors increased opportunities for exercise and exploration of the natural world. The museum's implementation of healthy staff initiatives, particularly "ranger duty," models healthy behavior for all members and visitors while enhancing their outdoor experiences.

Museum Background and History

Throughout its sixty-two-year history, the Museum of Life and Science in Durham, North Carolina, has steadily grown indoors and out. MLS originated in 1946 as a small trailside nature center. It is now a seventy-acre site with nearly 60,000 square feet of indoor public space frequented by generations of families.

MLS focuses on its mission: to create a place of lifelong learning where people, from young children to senior citizens, embrace science as a way of knowing about themselves, their community and their world. The museum is operated by a team of sixty-five full-time staff augmented by about 100 volunteers and thirty-five to forty-five seasonal adjunct staff. With its unique indoor/outdoor environment, MLS serves more than 319,000 visitors annually.

In 2006, MLS opened *Explore the Wild*, a six-acre woodland and wetland site that includes habitats for black bears, red wolves and lemurs, and also features interactive exhibits and multi-media kiosks. In 2007, the museum opened *Catch the Wind*, a four-acre science park featuring a 5,000-square-foot radio-controlled sailboat

Once the exhibit space opened, each staff member was asked to take a one-hour shift once a week to serve as an outdoor ranger. Known as "ranger duty," the primary drivers for its implementation were the following: providing excellent customer service, encouraging exercise for a healthy staff, ensuring the safety and comfort of guests and more fully engaging visitors in the new outdoor interactive environment. The whole trip-from the front desk, around the exhibit and back-is 1.4 miles, and staff is encouraged to travel at least two laps during their shift. pond, the Ornithopter flight ride and other hands-on windthemed exhibits.

For lifelong learners of all ages, MLS's brand of experimental and social learning is a key building block of scientific literacy. MLS provides a safe, unique and educational place for families to interact and experience the outdoors while showing children that a career in science can include outdoor activities.

Creating Safe, Attractive, Interactive Outdoor Experiences

Even before the new tenacre outdoor exhibit space was opened to the public, all staff were encouraged to walk



Out of the office and into the woods on ranger duty, the museum's director of membership advancement, at left, shows visitors the way to the *Catch the Wind* exhibit.

around the site to keep up with its development and to see what was newly added. This practice was particularly important for administrative staff whose duties kept them at their desks for the bulk of their work week. MLS provided staff with pedometers and even hosted a staff walking contest, a brainchild of the museum's wellness committee composed of staff from various departments and led by the museum's human resources specialist.

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During the development of the outdoor exhibit space, the MLS executive staff wanted assurance that a safe and engaging environment for visitors was being created. The need for staff coverage in a large outdoor exhibit space—far from phones and the main building—and the lack of funding to hire new staff were primary reasons for the formation of MLS's healthy practice. It was decided to assign existing staff to the exhibit space on a regular basis and equipped with walkie-talkies and access to first aid supplies.

Ranger Duty: From Conception to Implementation

The concept of ranger duty was first presented to managementlevel staff by the museum's executive team. All directors and managers were given an opportunity to review the process with an executive team representative. The process was then introduced to the full staff along with a proposed schedule. The project was described in detail to the board of directors who were also given an opportunity to review and discuss it. Some staff were a bit leery at first but once assured that they would receive the proper training and support to succeed, they accepted it.

It took two months to implement the program; constant fine tuning was necessary. After realizing that there are so many lifelong learners among our visitors, as opposed to casual strollers, we modified the program by providing more content-based staff development than was originally planned. The lifespan of this project is indefinite. Project startup costs of about \$5,000 covered ranger materials, including guidebooks, binoculars, first aid supplies, etc., and some training costs. They were partially funded by Coca-Cola, whose foundation's mission is to improve the quality of life in the community and enhance individual opportunity through education. The project is now completely funded from MLS's operating budget.

A clearly defined expectation was that the addition of staff rangers would provide exemplary customer service while providing a safe and engaging environment for our visitors—and all without adding costly new staff. But the practice had multiple payoffs. Several staff members have shared rewarding personal experiences, such as helping a child to find a tadpole, viewing turtles sunning on a log in the wetlands or aiding a family trying to locate a red wolf in its habitat. Rangers help visitors identify the plants and wildlife within the exhibit area. Guests leave MLS with new understandings and awareness of nature in general, and they come back for more! There is much value in having a presence within the exhibit space so guests feel safe, accommodated and educated.

Evaluating Effectiveness

There is evidence to support the efficacy of the ranger program. Staff report that ranger duty is often the highlight of their day. They are always sharing stories about the visitors they encounter during their shifts. Through feedback solicited from on-site evaluation forms as well as collected from our Web site, positive comments about staff interaction and availability multiply. New audiences have been reached, but it is uncertain whether this result was due to the staff presence, the opening of new exhibits or both. We are inclined to believe that both contribute to the growth of new audiences, but as yet we have no data to support this.

The museum's image within the community has improved. Ranger duty allows visitor access to staff they may not typically see. Likewise, staff members connect with visitors who they may not necessarily meet within the course of their day. Professional and government members of the community, such as the Durham Visitors Bureau, Durham County Commissioners and the Durham County Manager, continually support these personal contact efforts by trying to help us find new avenues of funding for all of our programs.

An unexpected benefit of the project for staff is the walking. Adding one hour of exercise a week is a step in a positive direction for many staff with sedentary jobs. Not only do they get the exercise, but they also experience direct connection with the museum's audience, which greatly informs the work they do at MLS, no matter what their particular jobs are.

REPLICATION TIPS

Without an extensive outdoor environment, it might be difficult for another museum to replicate this practice exactly, but it can definitely be scaled and adapted to fit most scenarios. Here are some steps to consider:

FIRST STEPS

I. Identify the museum area that you want staff to cover. Outdoor areas are preferable, but not necessary. A large indoor exhibit area may suffice. Even smaller museums, composed of primarily indoor space, can adapt the program to fit their needs.

2. Determine the hours that you need staff coverage in an exhibit area.

3. Identify staff members who are able to range. Some staff are unable to range due the nature of their job. The facilities director, for example, is always on call dealing with issues all over the campus; however, he does his own version of ranging while performing his daily tasks, keeping his eyes peeled for visitors in need of assistance. About 5 percent of staff were excused from ranger duty for health reasons.

4. Create a ranging schedule. Each department has a time slot. For example, the operations department covers 11:00 a.m. to 12:00 p.m. Monday through Friday. Departments can decide among themselves which department covers which day/time slot. If an individual employee is not able to cover his or her shift, he or she tries to get coverage within their own department.

5. Provide EXTENSIVE and ongoing training for your staff so they feel empowered to interact with the visitors and are able to make quick decisions in challenging situations.

a. Safety and Emergency training: How do you handle emergencies? Provide training for how to manage situations such as medical problems, lost children, evacuation procedures, inclement weather procedures, etc.

b. Customer Service training: How do you interact with visitors and deal with customer issues?

c. Training about the exhibit itself: What is the exhibit about? We used in-house staff and brought in outside experts, including wildlife biologists and ornithologists.

d. Exhibit interpretation: You may know about the exhibit yourself, but how do you pass that information on to the visitor? Teach effective communication techniques.

6. Create a log book for staff to sign and record their experiences. Wonderful comments have appeared, such as "I saw a new kind of dragonfly today" or "The blue heron was really easy to spot this morning" or even "We sure are going to have a lot of frogs this summer with all the tadpoles I saw today."

7. Gather supplies for the staff, such as first aid supplies, field guides, binoculars and walkie-talkies. These can either be carried in a backpack or made readily accessible in a central location.

8. Ensure the staff rangers have a uniform or are identifiable in some way to visitors. A full uniform is great, but even a t-shirt with your logo is adequate.

9. Keep collecting feedback from participating staff as input for continual training. When staff ask about a science concept related to the exhibit, we try to find a local expert, either internal or external, to provide more information. If a question comes up about customer service delivery it is answered and then put on the agenda for the next all-staff training.

REQUIRED CONDITIONS

Although the program can certainly be scaled, these elements or conditions must be in place in order to capture the essence of the program:

I.Staff buy-in: You must have buy-in from your staff. If they are not included in the planning stage, they may resent the additional responsibility. This project was unveiled as a professional development opportunity and treated as such during the training process.

2. Upper level management support: For obvious reasons, this is required. If management doesn't fully support the program, staff will not have the freedom from their daily workload.

3. Commitment to customer service: Organization-wide commitment to delivering exemplary customer service so staff will understand that this goal is essential.

derstand that this goal is essential. And it must start at the top with the executive director who must communicate the importance of customer service to all staff on a regular basis.

4. Available expertise: It helps to have local experts who can teach or be consulted for content training when needed. MLS is fortunate to be surrounded by three major universities, all of which can supply a wealth of expertise when called upon.

5. Support from community leaders: Community leaders should be brought in from the beginning and shown what you are trying to accomplish in order to cultivate learning within the community. This will aid in getting their support for the program.

Challenges

Surprisingly, not all staff were enthusiastic about ranging at the beginning. Finding enough time to train them all was challenging. The main concern from reluctant staff was finding the time in their already busy day to range. Even one hour a week at times feels like an overload. Once they knew they had support from their supervisors, who themselves were committed to ranging, we had full buy-in.

An unexpected, yet pleasant discovery during these trainings was that we have a staff who themselves are lifelong learners. And they were starving for more information. This led us to re-think our approach to staff development.

Ranging can be somewhat physically demanding. There is a lot of walking (standard route is 1.5 miles) and temperatures in Raleigh's hot, humid summer can climb above 100 degrees. You must provide ways for staff who cannot physically handle ranging to help in other ways, for example, covering the phone for someone who is out on the trails.

A very small museum may have difficulty with this program besides space—they may not have enough staff to run the museum *and* range their exhibit space. But, some smaller museums may already be doing this out of necessity. If a community has a large volunteer



The museum naturalist mostly works indoors, but on ranger duty he wears a white hat and shorts and shows a group of visitors a dragonfly that has landed on a branch near the museum's wetlands.

An unexpected benefit of the project for staff is the walking. Adding one hour of exercise a week is a step in a positive direction for many staff with sedentary jobs. Not only do they get the exercise, but they also experience direct connection with the museum's audience, which greatly informs the work they do at MLS, no matter what their particular jobs are. base, they can recruit volunteers to fill ranger roles; however, this limits the benefits of encouraging staff to equally engage with visitors and become knowledgeable about museum exhibits beyond what their "real job" may require. It also dilutes an important healthy by-product of this practice: getting staff up on their feet and walking around on a regular basis.

Unexpected Outcomes and Final Thoughts

After two years, the project has been nothing but beneficial. In planning anything—from exhibit signage to placement of trash cans to the color of the walls—this practice has helped MLS evolve into an organization where all staff always consider the visitors first. Ranging has reinforced the concept that the visitor is the reason for our

existence, and not an interruption in our daily routine. Frequent visitors, most of whom are members, have the most impact. Time spent on ranger duty is a step toward becoming a more member-focused organization.

On the staff health benefits side of the equation, as a result of the ranging practice more staff have joined the museum's wellness committee. Following the example of large corporations such as General Mills, the museum's HR specialist started the wellness committee about a year and a half ago in the hopes of helping staff become more health-conscious and in turn possibly reducing the number of claims to our health care provider. The committee hosts an annual health fair, provides a healthy continental breakfast at monthly staff meetings and healthy snacks at other staff events, coordinates health-conscious contests (giving out pedometers), provides monthly tips/resources for staying healthy and holds small group discussions on topics such as smoking and diabetes. Walking clubs have emerged. Staff and volunteers get together before or after hours to walk the ranger route. We have included mileage on our maps so visitors—and staff and volunteers—know how far they have walked.

Staff now looks forward to weekly ranger shifts. Delivery of better customer service and the number of guest interactions have increased. Most staff believe that they are more productive after the nice brisk walk. The program offers a weekly reminder to all staff, from the accounting department to the maintenance department, of why MLS exists. When an employee obtains that kind of reassurance in a job, then that job can become very satisfying, which in turn leads to happier and healthier employees. Staff members carry their experiences from the outdoor exhibit into their other interactions with visitors within the museum and colleagues, known as "internal customers." While the most compelling reasons to begin this practice were to provide safe, engaging experiences and excellent customer service, the benefits of a happy, healthy and more knowledgeable staff provide even more compelling reasons to continue.

In-house programs that ripen with ongoing health and wellness-themed activities

idspace re-opened on December 16, 2004, in its new location next to the Rose Bowl in Pasadena, with 5,000 square feet of indoor exhibits and 2.2 acres of gardens. Together, the indoor and outdoor exhibits tell the story of how humans coexist with the natural world. The Digging Deeper Gallery features more than twenty interactive exhibits on paleontology, seismology, entomology, geology, botany and geology. While creating the outdoor learning environments, much attention was given to realistically replicating local habitats



Using healthy ingredients, some of which have been grown and harvested from Kidspace's Burrito Garden, chefs face off to see who can make the best burrito.

Mini-Iron Chef: From Garden to Table

Kidspace Children's Museum Pasadena, California Valerie R. Oguss, Director of Education

in a controlled environment that would allow children to explore them in a safe manner and reconnect with the natural world.

The Gardens

In addition to supporting the "ologies," Kidspace offers guests ample opportunities for physical play both indoors and outdoors. The museum has several climbing towers, designed by Playscape designer Tom Luckey, including two forty-foot structures. Children can ride one-of-a-kind tricycles on specially designed outdoor tracks equipped with traffic signs. Trike Tracks leads into the museum's gardens that feature a stream that serves as a miniature recreation of Pasadena's most famous geographical feature, the Arroyo Seco. The outdoor learning environment also boasts six themed gardens ranging from a Bee & Butterfly Garden to a Bumpy Fuzzy Garden. The Bat Cave, a traverse Climbing Wall and a small climbing structure called the Rootwad complete what we call the "Back 40."

The heart of the Mini-Iron Chef competition is that children prepare and eat good food while participating in a really fun and lively event. But, more than just that, the program fosters a deeper understanding of the connections between food and its sources. What makes this program unique from other programs presented at the museum is its connection to our edible gardens.

Prior to re-opening, supporters tentatively asked how we planned on keeping children from "destroying" the gardens. To allay their fears, we created a special gardening area that could be "stomped on" by children. Called the Interactive Garden, it became the focal point for much of our early outdoor educational programming. Its original objectives enabled children to learn about agricultural methods as well as the importance of the sun, atmospheric conditions, seasons and environmental stewardship as critical components to cultivating crops. In its initial phase, it was comprised of four different gardens, including the Burrito Garden, the Sun Garden, the Medicinal Garden and the Sensory Garden. Together, these gardens helped children understand how plants are cultivated and how they serve animals and mankind. The Burrito Garden included all of the vegetable ingredients (tomatoes, beans, peppers, tomatillos, corn, cilantro, garlic and chives) that make burritos a tasty and a well-balanced meal. The Sensory Garden featured plants that are soft to the touch (lamb's ear), cool to the taste (six types of mint plants) and pungent to

the tongue (nasturtium). The Sun Garden featured sunflowers and an innovative solar powered fountain that helped children learn how sunflowers track the sun for nourishment. A three-by-two-foot solar panel pivoted and swiveled on a fixed stand enabling kids to manipulate the device to track the sun. As they tracked the sun, the fountain activated and in turn watered the plants.

Despite these efforts, we soon realized that the gardens were in no danger of being "destroyed" by our guests. In fact, we had a difficult time getting guests to interact with the gardens at all! Caregivers were quick to pull their toddlers away from the fuzzy plants; teachers would line up their students in tight rows as they wound their way around the garden paths without ever stopping to explore. We needed a full-time staff person dedicated to not only caring for the Interactive Garden, but also to developing programs that created opportunities for guests to actually interact with the gardens in meaningful ways.

Mini-Iron Chef

Like all children's museums, Kidspace values interactive learning, so we decided to get children involved in gardening through cooking. As a result, the Mini-Iron Chef program, a hands-on cooking program, was co-developed with the museum's café. The program challenged children to create healthy concoctions with ingredients found in the Interactive Garden.

The Food Network's "Iron Chef "Television series was the inspiration for the museum's own pint-sized version. Fortunately, Kidspace has a connection with the television show: Wolfgang Puck Catering is the museum's café food vendor and Wolfgang Puck, himself, is an Iron Chef! When we approached management at Puck Catering they loved the idea and contributed to the program by donating all the food and providing us with an "Iron Chef" from one of their restaurants to preside over the program. We negotiated a fair fee structure for their labor and worked closely with them to come up with each Mini-Iron Chef challenge.

The First Mini-Iron Chef Showdown

With the surrounding Latino community in mind, we decided to launch the Mini-Iron Chef program by highlighting the museum's popular Burrito Garden and asking guests to "make the best burrito" with ingredients found in the garden. Kidspace's café donated all the ingredients including giant green tortillas, chopped veggies, various salsas, sour cream, etc. They also provided several catering staff on the day of the event as well as one of their very own Puck chefs. The program was offered to our guests for free (along with museum admission).

The first Mini-Iron Chef program accommodated up to twentyfive children between the ages of five and twelve. At that time, the museum didn't have online registration, so families had to sign up at the museum on the day of the event. Just before the program began, children were outfitted with aprons, gloves and an authentic chef's

hat with a Kidspace logo. The children were asked to stand around several sixfoot tables with all of the ingredients prominently displayed. A museum educator played the role of the MC of the event and *all* of the caregivers were kindly asked to stand in a designated spectator area. It was very important that the children be given the freedom to make their own ingredients choices to fill their burritos—without any parental influence.

The chef introduced the program by giving a brief explanation of what a burrito is and where all of the ingredients came from. Then the countdown began as the children created their own burrito concoctions within a certain time limit. As they piled on rice, beans, chilies, salsas and other veggies, the MC gave a running commentary (often laden with humor) for the cheering spectators. At the end of the timed portion of the competition, the chef demonstrated how to roll a perfect burrito and all the children attempted to roll their own (some were more successful than others). Finally, time for the judging-the guest chef and the MC collaborated to make the tough decision. After a nerve-wracking one-minute deliberation, the MC announced that they had a twenty-fiveway tie! (Somehow this same outcome occurred at every single competition.) Each child was then given a medal and the opportunity to shake hands and take a picture with his/her yummy creation and the guest chef. Then the eating began!

What did the children learn? They learned that food comes from the ground, that burritos can have a wide variety of toppings, that proportions are important when making burritos (one memorable burrito was made entirely with jalapeños and a scoop of rice) and that cooking can be creative. Most importantly, they learned that they, too, can cook healthy meals.

Challenges of Mini-Iron Chef

Following an extremely positive response from museum guests, particularly members, we subsequently planted a Winter Garden, which launched a Stone Soup Mini-Iron Chef challenge, where children competed to create the most appealing and tastiest vegetable soup. Then came a Thai Garden, which corresponded with the Asian Salad challenge. Although these were successful food themes, it wasn't always easy coming up the food challenges that fit into the Mini-Iron Chef model. We were very limited in our choices because we didn't want to deal with hot stoves. Therefore, we attempted to



Thriving in front of the corn are the Kidspace Burrito Garden's pepper plants.

The Mini-Iron Chef program...led to the development of a whole new outdoor program called Harvest Corner, which introduces children to different aspects of the agricultural process. In this participatory program guests are encouraged to return on a weekly basis to participate in the nurturing, growing and harvesting of plants and gardens: planting, watering, plowing, winnowing straw and grains, sorting beans and seeds, tasting cultural foods and making tortillas with homemade solar ovens. showcase challenges that allowed the children to mix pre-cooked or raw ingredients together in creative ways. Sometimes we veered away from the garden food themes, which meant that we would find ourselves presenting not-so healthy choices, such as the infamous Cookie Decorating challenge or the Make the Best Chocolate Milk challenge which featured ingredients such as sprinkles, marshmallows and chocolate chips. The one positive outcome from that challenge was a mom who told us that she could never get her child to drink milk before he participated in the program.

A surprising—and disturbing challenge we faced was that caregivers would often lie about their child's age to get them into the competition. We strongly suggested that the program was suitable for children ages five to twelve because younger children would often get overrun by the older children trying to score the right combo of ingredients. Younger children would merely stand by the table, paralyzed by the frenzy. To be fair to the other participants, parental involvement was not allowed, so younger children did not have the most positive experience.

Another significant challenge was the number of staff required to "run the show." The program was a true collaboration of several departments, including the education, operations and facilities departments as well as the café staff and Wolfgang Puck Catering. There were many, many details to keep track of, including registration, food preparation and set-up, acquiring and preparing the chef hats, making name tags for the children, coaching the MC and meeting with the Wolfgang Puck chef. The museum often ran three or four competitions in a single day, but would only offer the program once or twice a quarter. After several debriefing sessions, we were finally able to scale down the number of staff to about three Kidspace staff members and three café/Wolfgang Puck staff.

The Garden Grows: Back 40 Educational Programming

The Mini-Iron Chef program proved that museum guests were very interested in food-related activities, but it didn't end there. It led to the development of a whole new outdoor program called "Harvest Corner," which introduces children to different aspects of the agricultural process. In this participatory program guests are encouraged to return on a weekly basis to participate in the nurturing, growing and harvesting of plants and gardens: planting, watering, plowing, winnowing straw and grains, sorting beans and seeds, tasting cultural foods and making tortillas with homemade solar ovens.

As we learned how to work more effectively with the museum's outdoor spaces, we began to develop programming that guided our guests through the gardens. Garden Adventures are thirty-minute "walking tours" that guide families through the gardens while conducting hands-on activities along the way. This program is meant to present the gardens in a different light and to help break down the barriers between children and plants that so many traditional garden institutions have ingrained in us all. Popular Garden Adventures have included Lost in the Woods, which teaches children wilderness survival skills, and The Veiled Garden, which challenges children to "look" at the gardens while blindfolded, placing a greater emphasis on experiencing a garden through their other senses.

With the gardens fully activated, the connection between the museum's indoor galleries and its outdoor learning environments has been strengthened. To optimize the guest learning experience, staff developed the Nature Exchange Discovery Backpacks and the Nature Exchange Challenge Books. The Discovery Backpacks are self-guided adventures that lead children on science, art and cultural expeditions within Kidspace's exhibits and gardens. Each backpack includes science experiments, art projects, objects and games to help caregivers facilitate the many hands-on learning experiences found throughout Kidspace. Like the backpacks, the Challenge Books also provide families with self-guided experiences through the museum's exhibits and gardens as they answer questions and conduct miniactivities. Children are also awarded Nature Exchange points for completing a Challenge Book.

Four years after its re-opening, the Kidspace environment was completely transformed to take advantage of its full indoor/outdoor potential. The museum replaced the original Bat Cave that stood at the top of the gardens. The Bat Cave and the Miner's Outpost that surrounded it served as an interesting set design piece; however, children were often frightened by the pretend bats that hung in the cave, and the only interactive component was a sluice that needed to be mediated by an educator. An attempt was made to transform the Bat Cave into a Giant Geode outfitted with crystals and amethysts, but this too, quickly became too static. In 2008, the Bat Cave and Giant Geode were torn down and the new Harvest Corner program was given a permanent home. Children have assisted in the cultivation of Harvest Corner cropland with more than twenty rows of vegetables that need pruning, watering and harvesting throughout the year. An eight-by-twelve-foot barn houses program supplies and equipment for all the activities.

Environmental education and outdoor play permeate nearly every aspect of the museum's daily programmatic operations. The museum's outdoor exhibits and programs are interdependent. They emphasize the connections between learning about-and just being in-nature and kids' own health. Harvest Corner is now the backdrop for another cooking program being piloted with our café called Puck's Apprentice. The experience of the exciting but competitive Mini-Iron Chef program has evolved into an activity with younger kids in mind. In Puck's Apprentice, children and their caregivers cook side by side. We've even added a class dedicated to three-to-five-year-olds. We've narrowed the amount of staff down to one program coordinator, a guest chef and several café employees; we now charge a fee to help cover labor and supplies. But in keeping with our promising practice-and in the tradition of the beloved Burrito Garden-children and their caregivers cook up dishes inspired by ingredients grown organically by children in the Harvest Corner cropland.

REPLICATION TIPS

Kidspace had all the right ingredients to pull off a kid-sized version of the popular "Iron Chef" program. But what if your café isn't operated by a Food Network Iron Chef, and what if you do not have any outdoor space to plant a burrito garden? The heart of the Mini-Iron Chef competition is that children prepare and eat good food while participating in a really fun and lively event. But, more than just that, the program fosters a deeper understanding of the connections between food and its sources. What makes this program unique compared to other cooking programs presented at the museum is its connection to our edible gardens. If you don't have any outdoor space to grow an edible garden, we would suggest you start an indoor garden and grow herbs out of terra cotta pots or, better yet, recycled containers! The actual Food Network "Iron Chef" program features one ingredient around which the chefs are challenged to create several dishes. Why not challenge guests to create a dish using an herb like basil as the featured ingredient? It's all about getting children to explore new foods, learn about where they come from and be creative with their own cooking.

To keep costs down, partner with local restaurants or a supermarket so that the foods can be donated. Kidspace once partnered with a local Soul Food restaurant that provided specialty foods, such as collard greens, in honor of Dr. Martin Luther King, Jr.'s birthday. In return, we permitted the restaurant to hand out take-out menus to museum visitors. The children loved the collard greens, and many museum guests found a new family-friendly restaurant.

While we did not charge our guests to participate in the Mini-Iron Chef program, other museums could charge a nominal fee to help offset the cost of supplies and food. Children's cooking programs have become extremely popular. Classes have been sprouting up in afterschool programs and camps and many of these venues charge hefty fees.

Mini-Iron Chef inspired kids to learn to cook using local, often homegrown, ingredients. The process of planning and executing this lively program revealed to museum staff the untapped potential of linking the museum's outdoor exhibits to its programming. For everyone involved, the ultimate links between where you live and what you can grow and eat there are the powerful lessons that children and families can take away from this museum experience.

etite Chefs, the cornerstone of Chicago Children's Museum's (CCM) Healthy Family Programs, simply invites families to create healthy snacks. The program, developed five years ago by CCM staff, promotes the importance of healthful eating while exposing children to a wide range of nutritious foods. Informed by research from the Consortium to Lower Obesity in Chicago's Children (CLOCC), Petite Chefs evolved into an even stronger program with a more targeted mission: Children and caregivers learn that healthful eating is not only fun, tasty and easy, but can be done at home.



Kids gather round to learn how to make healthy snacks from a real chef.

Chicago Children's Museum Chicago, Illinois Linda Wang, Family Programs Educator

A large part of Petite Chefs' success is due to CCM's threeyear-old collaboration with The Cooking and Hospitality Institute of Chicago (CHIC), a local culinary school. The school designs no-cook, child-friendly recipes and sends a chef, garbed in chef apparel, to lead the program. The mix of CHIC's culinary expertise and knowledge of foods combined with CCM's expertise in connecting play with learning provides a strong platform for teaching families about healthful eating.

Petite Chefs offers two back-to-back thirty-minute workshops a week for nine weeks during the summer when attendance is at its highest. Free tickets are distributed to children and adult visitors at the admissions and guest relations desks. Space in each workshop is limited to twenty-five, so these tickets control the number of participants for each session.

The Museum and Its Health Focus

CCM's 57,000-square-foot Navy Pier facility currently offers fifteen permanent exhibits and programming spaces; it hosts more than 500,000 visitors annually. In addition to serving visitors, CCM makes significant investments in neighborhoods across Chicago, particularly among children who might not otherwise have access to the museum's rich array of resources. With more than 400 community partners, CCM draws families from every background and neighborhood and invites them to share and celebrate their interests, talents and points of view.

In response to the rapid growth of childhood health problems, CCM developed health and wellness initiatives. The programs encompass early intervention, physical activity and awareness of safety, wellness and nutrition. The objectives are the following:

• increase visitor knowledge of the link between play, health and wellness by creating interactive programming;

• develop strategic community partnerships to identify issues, concerns, resources and needs;

• provide a neutral location for families to access information and experts in the field to support a healthy lifestyle message;

• connect learning and *fun*—a key factor in encouraging positive

behavior change in children and adults; and

• collaborate with families and communities through shared experiences in a hands-on environment that empowers them to take on an active role beyond the museum walls.

Families and communities are more likely to identify fun with health and nutrition when topics are approached in a playful and interactive way. Some program examples include Banana Day!, which honors a "healthy" friend as visitors make banana art, tell banana jokes and play banana bowling and beanbag toss. An-

other nutrition activity, Food-O! Bingo, familiarizes visitors with the five major food groups and celebrates the new food pyramid.

CCM also collaborates with external experts to address issues such as immunization, lead screening, injury prevention, fire safety, developmental screening and family enrollment in affordable insurance programs. Community partners include the Chicago Fire Department, Prevent Blindness America and Kid Care of Illinois. By providing space for these organizations, the museum has been able to help them forge new connections between their valuable resources and communities in need.

The Identification of-and Response to-the Need

In 2003, CLOCC reported that Chicago's kindergarten-aged children were overweight at more than twice the national average. Data released in 2004 from the Sinai Urban Health Institute indicated that children from predominantly minority neighborhoods in Chicago were overweight at *three to four times* the national average. In response CCM has concentrated its efforts to directly address issues related to the epidemic. Healthful eating habits must start in early childhood, and since CCM caters to early learners, its facilities serve as an excellent venue to target this audience.

Recipes for Petite Chefs feature fresh fruits and vegetables in their most natural and whole states, allowing children to understand the origin of the foods they eat. For example, fresh squeezed orange juice is preferred to frozen concentrate. Ingredients are low-fat and contain no white sugar or bleached

flour. Visitor comments and obser-

vations by CCM staff continue to inform Petite Chefs regarding different food practices and preferences, resulting in modified recipes for myriad eating styles, such as kosher and vegan cuisines. Selected recipes include fruit kabobs, yogurt parfaits and veggie "bowls" created from green bell peppers. Children enjoy getting their hands messy as they assemble new ingredients for immediate tasting. They acquire a sense of ownership and accomplishment. Parents are surprised by how little it takes for children to try something new and healthful.

The Development Process

2004 Recognizing a demand, CCM staff developed programs where children learn about healthy foods and eating, preferably from culinary professionals. Several program ideas and formats were prototyped. Experimental themes ranged from focusing on one particular fruit or vegetable, such as Celebrate Celery, where visitors create various snacks using this ingredient, to highlighting food business ventures and community chefs. For example, a local pretzel shop was invited to demonstrate the process of pretzel-making. Although the response to all these approaches was high, inconsistencies of styles and commitment from outside vendors proved difficult in carrying out a cohesive program.

2005 CCM staff invited professional chefs from local restaurants to facilitate Petite Chefs workshops. Not only are these restaurant chefs knowledgeable about healthy eating and food preparation, but they can acquire reasonably priced ingredients. Additionally, it is important to CCM staff that young visitors interact with professionals from the food industry.

Although this approach offers visitors a more authentic food workshop, the collaboration proved to be difficult. Some chefs lacked experience in relating to children, while others lacked creativity and excitement in their teaching methods. These partnerships were further complicated by occasional tardiness and no-shows.

2006 CCM partnered with CHIC, notable for its Le Cordon Bleu Program of Paris. CHIC chefs knew a lot about food and food preparation, and they are experienced teachers! This collaboration also ensured guaranteed commitment, a key ingredient in making any program a success.

Before the 2007 season began, CHIC and CCM's Family Programs Team worked together to outline the purpose of Petite Chefs, program dates, times, participant capacity and responsibilities. CHIC's priorities included designing no-cook, kid-friendly recipes, acquiring and preparing ingredients for individual distribution and arriving one hour before the scheduled workshop. CCM's responsibilities included providing workshop space, finalizing recipes, providing an honorarium and allowing the distribution of any CHIC brochures to workshop participants.

2007 Aetna Foundation, a health care benefits company, expressed interest in investing in one of CCM's health and wellness programs. Due to its hands-on teaching and positive feedback from museum visitors, Petite Chefs received a \$1,000 donation from Aetna to underwrite the 2007 season. Through the process, an Aetna employee became more interested in supporting the museum and eventually joined the museum's board of directors.

2008 Aetna Foundation awarded a \$25,000 grant to Petite Chefs and CCM's Healthy Family Programs. As a contributing supporter, Aetna is recognized in the museum's newsletter, on the Web site and on signage related to Petite Chefs and Healthy Family Programs. Additionally, Petite Chefs hosts two volunteers from Aetna every week to help with the program. This allows employees of Aetna to see the positive work its company helps fund in the community and provides a direct program connection to its funders. CCM's board member, the Aetna employee, volunteers in the program and doesn't hesitate to make his own healthful snacks!

The Outcomes—Institution, Audience, Community, Staff

The success of this program is demonstrated by its high demand. Multiple visitors return to participate weekly. Because the menu changes from week to week, each experience is unique and memorable. Due to its resounding popularity, the museum began to seek ways to incorporate Petite Chefs in museum-wide initiatives. In July 2008, the program was a featured workshop during the Week of the Young Child.

During the 2007 season, Petite Chefs drew 359 visitors in sixteen sessions. Summer of 2008 pulled in 455 visitors in eighteen sessions, consistently reaching the maximum capacity for each workshop. Although the overall participation increased approximately 25 percent from 2007–2008, the most notable increase lies in adult participation: 46 percent.

The summer season attracts many tourists: 51 percent of Petite Chefs participants are non-residents of Illinois and 4 percent are from other countries. Of these visitors, common reactions are: "I wish they had this kind of thing from where I'm from!" and "How neat! We've never done anything like this before!" A visitor from Hong Kong with her two children (ages four and six) commented, "It seems so simple and yet, I never thought of doing this with my children! These recipes are very American. I didn't think Americans had such healthy and simple snacks for children. We have all of these ingredients back in Hong Kong. I am going to share this with my friends!"

The remaining 45 percent of the participants are from Chicago or the surrounding area. After their initial Petite Chefs experience, the majority express an interest in returning.

Regulars for three seasons of Petite Chefs, CCM member Laurie Tsotsos and her eleven-year-old daughter Stella of downtown Chicago write: "Stella and I have been coming to CCM for the last nine years. It's been really fun for both of us. Petite Chefs is a good example of a terrific, inspiring program. First, the food the kids prepare is really healthy. A chef comes dressed in a spotless white outfit with a tall chef's hat and demonstrates the technique and teaches the kids a few cooking vocabulary words, like 'chiffonade.' Then the kids get to make it themselves alongside their moms. They get involved and see that cooking can be fun for any age. Plus, you get to eat it afterward and it tastes great! My daughter and I agree that the lemonade with strawberries and raspberries was the best and so easy too. A close second was the green pepper boats with ranch dressing and vegetables for dipping. My daughter doesn't usually eat anything green, but once the vegetables were coated in the dressing, she was really enjoying them. I had to get the recipe for the dressing before we left!"

Uno Pasadhika, age three, and his mother of southwest Chicago attended every Petite Chefs session of the 2008 season. Asked what it is that continuously brings them back to the program, Mrs. Pasadhika answers, "Uno just loves it! I have also noticed a developmental change in him. The first time, he had difficulty standing still and listening to directions from chef. With each week, he appears to be more focused. He is also familiar with Chef Wook's face, so he feels more comfortable. And I have fun too!"

REPLICATION TIPS

Variations of Petite Chefs can be implemented in any institution. Key ingredients are 1) dedicated museum staff, 2) partnership with local experts on nutritional eating and preparation and 3) a workshop room.

ATTRACTING PARTICIPANTS

Set-up for Petite Chefs begins early. Program details and food alerts are posted in three different locations: admissions desk, guest relations desk and the workshop room door. These signs list all the ingredients of the recipe, advising visitors to politely withdraw participation if allergic to any of the featured foods. (Peanuts and peanut-derived ingredients are not included in any recipes.) Tickets are offered one hour before the start of the first session.

THE ROOM SET-UP

Ideally the room should be a space that can host twenty-five to thirty participants and include a demonstration table. A sink is recommended so that children can wash their hands (provide a sturdy step stool if the sink is too high). If plumbing is unavailable, encourage participants to wash hands in bathrooms prior to entering the workshop. Since recipes call for fresh fruits and vegetables, direct access to a refrigerator will preserve freshness and offer a cool sensation for the taste buds.

To accommodate twenty-five participants, four large (four by eight feet) tables are set in parallel rows. Two tables are lowered a few inches to provide comfort for smaller visitors. Each table is surrounded by seven chairs, three on each side and one at the end. Chair sizes vary according to the height of the table. Extra chairs are scattered around the room for any visitors who wish to observe or videotape rather than participate with their families. Extra floor space is available to accommodate strollers. Position the chef's table perpendicularly and lower at a height where little ones can see.

Cover tables with sheets of butcher paper rather than plastic table covers to save time and be environmentally friendly. Individual work stations are identified with twelve by sixteen-inch sheets of chef parchment paper. Not to be confused with tracing paper, chef parchment paper is durable for plastic knife cutting and liquid spillage.

Staff from CHIC arrives with separate utensils and ingredients, apportioned and individually packaged for each participant. Packages are placed upon each parchment paper, as well as plastic, non-toxic gloves.

Lastly, a CD player is turned on, offering background tunes to energize the room.

HOW THE CLASS IS RUN

Doors open ten minutes prior to workshop time. Staff, Aetna volunteers and CHIC facilitators welcome families, accommodate strollers, lead hand-washing, collect tickets and make announcements over a public address system.

Staff leads a discussion on the importance of hand-washing before turning to questions about what it means to eat nutritious foods: What does healthful mean? Name some examples of healthful foods that you have at home. What does a chef do? The staff then introduces the healthful snack and, to thunderous applause, the chef!

Adults stay at their tables while children gather at the chef's table for the demonstration. They listen carefully as the chef shows them how to assemble the snack. Once finished, the children return to teach their families. Recipe instructions are kid-friendly and simple to follow with little or no adult supervision. Together, children and their caregivers peel, slice, dice, pour, spread and assemble. By repeating the chef's instructions and imitating his/her actions, young visitors become "petite chefs."

As families prepare their snacks, staff and volunteers assist the chef in teaching and offering encouragement. They ask questions that aid and scaffold the visitors' learning experience: Have you ever eaten something like this before? What does it remind you of? What does it taste like? If it tastes bitter, what should you add? They also ensure that families practice appropriate food safety.

Then comes the best part: tasting the healthful snack together. As everyone enjoys the day's creations, staff reviews what has been learned. Some children are trying a fruit or vegetable for the first time. Others are surprised by how great healthy snacks taste! Adults realize that children are more likely to eat something that they've prepared themselves.

Before leaving, each petite chef clears the workspace and throws garbage away. Staff prepares for the second workshop: chef's table and workstations are replaced with new table covers, parchment paper and ingredients.

JOB DESCRIPTION FOR THE PERFECT PETITE CHEFS PARTNER

A model Petite Chefs partner is committed, punctual, friendly and approachable (especially the chef!); has access to reasonably priced fresh fruits and vegetables; is a professional representing a licensed or accredited institution; understands the museum and Petite Chefs' goals; and understands and respects the museum and Petite Chefs' food concerns.

The Take-Away

As the prevalence of childhood obesity continues to rise, childfocused institutions are uniquely positioned to become part of the solution, whether through literature, exhibits or workshops. Petite



A petite chef samples fruit kabobs assembled at her own parchment-paper-defined work station.

Recipe instructions are kid-friendly and simple to follow with little or no adult supervision. Together, children and their caregivers peel, slice, dice, pour, spread and assemble. Chefs has proven to be one of CCM's most successful vehicles for promoting a healthy lifestyle by providing an interactive workshop for the whole family. Children enjoy getting their hands messy as they assemble new ingredients for immediate tasting. They acquire a sense of ownership and accomplishment. Parents are surprised by how little it takes for children to try something new and healthful.

Of course, larger societal issues remain. Low-income communities still face challenges in obtaining fresh produce at affordable prices. Until quality produce is easily accessible to families in these communities, children will have minimal exposure to a selection of fresh vegetables and fruits.

Petite Chefs delivers a delectable experience. Equipped with a fun Petite Chefs memory and a copy of the recipe, families can take healthy practices beyond the museum walls. he yogurt tastes good. Why don't you like it?" a young visitor asked his friend. "Can we steal this idea from you?" came from the teacher. "Can I make some more?" "This one's for my mom." "I'm still hungry." These are among the frequently heard comments during Exploration V's regular weekly program, Wacky Wednesday.

Museum school-break workshops that involve cooking or are in any way food-related (human or otherwise) are always popular. Homemade jam, mixes-ina-jar, vegetable garnishes, fruit baskets and bird seed



Children assemble fruit pizzas with great care.

Explorations V Children's Museum *Lakeland, Florida* Sue Schluender, Education/Operations Director

cookies enable children to measure, pour and mix. With a successful track record for culinary arts in afterschool programming combined with the availability—and interest—of a staff member to teach children cooking skills and encourage healthy eating habits, Wacky Wednesday began in July 2006. Admittedly, it is an unlikely name for a healthy food/children's cooking program, but since the program is on Wednesdays and there are limited "w" adjectives that sound fun, the title stuck. Originally begun as a standard cooking class to learn new skills and just have fun with food, emphasis shifted to healthy eating choices as a result of recent research on childhood obesity. Wacky Wednesday is free with membership or daily admission. The average weekly supply cost of \$10-20 for twenty to fifty participants is included in the education department's annual budget.

Program Details

The program initially used Cup Cooking Picture Recipes by

The cup-cooking method is used by many primary (K-2) teachers to encourage children to read and follow directions with a clear goal. Children follow sequenced picture recipe cards to make and consume one child-sized portion of a healthy snack, measuring, pouring and mixing by themselves as much as possible.

Barbara Johnson and Betty Plemons as its primary cookbook. Since then, it has branched out to include other cookbooks, and favorite traditional recipes have been divided into oneserving recipes. (See book list.) The cup-cooking method is used by many primary (K-2) teachers to encourage children to read and follow directions with a clear goal. Children follow sequenced picture recipe cards to make and consume one child-sized portion of a healthy snack, measuring, pouring and mixing by themselves as much as possible. If baking or microwaving is required, cooking time is spent discussing food groups, favorite foods,

snacks, meals and good nutrition. Set-up, presentation and clean up take about an hour for the usual walk-in group of twenty children and their caregivers. When large groups are visiting the museum, the program repeats until all guests have had a chance to participate. Parents/teachers receive a copy of the day's recipe, a Cooking with Kids skill card and sometimes free/discount coupons for local restaurants. (The museum rents office space to a local restaurant chain, and they often donate kids' meal coupons for our visitors. Their kids' meals in-

clude healthy choices of fruits, vegetables and milk.)

The audience for Wacky Wednesday is diverse. Although the program is planned for kids ages three and up, participants range in age from barely walking toddlers (mom helps a lot) to the adults (parents, grandparents, teachers and nannies) who bring them. Everyone likes to eat! School field trips, regular members and walk-in visitors all enjoy a "homemade" snack. Large school groups are encouraged to join the activity in small (maximum of five) groups of students with their adult chaperone. Since recipes are usually quick and easy, it only takes about ten to fifteen minutes for kids to measure, mix and enjoy their snacks.

Menus planned during busy months (end of school year field trips especially) tend to be mix-and-eat with no cooking required. Since this is a morning program, fruits, veggies and cheese/cracker snacks have replaced many of the sweet offerings. A favorite is a simple cheese, all-beef bologna and reduced fat/low sodium cracker snack. The children use small cookie cutters to cut shapes from cheese and bologna slices and stack them on crackers. The scraps even get eaten to take care of the mess! This simple protein snack helps young visitors keep going without whining until departure time. Of course, juice or water helps wash down the crackers.

The smell of good food and the joy of making it yourself are a powerful enticement. Program samples or leftover supplies often find their way into the staff break room, where they immediately disappear.

Menu-planning is a challenge, since the eating habits of children and families fluctuate. This became clear during the museum's summer camp where afternoon snacks are included in the campers' day. Using the Wacky Wednesday format, each child made his/her own snack. Children took one look at some foods and emphatically stated, "I don't like that," or "I won't eat that!" When asked if they had ever eaten it, the answer was usually, "No. What is it?" Discussion ensued about what it was and how it was cooked and served. After watching friends make and eat the food snack, campers were encouraged to make it and try it themselves. They often discovered some of those new good-for-you foods smelled good and tasted even better. This reinforced the supposition that if healthy foods were offered in a fun way, with a little education on the side, children would actually eat them. Occasionally, a few sweet favorites are included in small quantities: pancakes, single-serving chocolate chip cookies and fresh lemonade.

A month of food-related programs was planned using classroom

teacher resources, simple cookbooks and online recipes. Each recipe had to be a child-sized portion, easy to make and cost-effective. If the recipe was not a single serving, it had to be taken apart and measured by the spoonful to create one. During the first year, each week's recipe was transformed into step-by-step directions, printed and laminated for protection. These picture recipe cards are placed under plastic mats or on trays used to contain spills. After the first year, five recipes for each month were placed in a file, ready for the next year's menu planning.

Large field trip groups make it necessary to plan/prepare uncooked foods such as dips, smoothies, fruit and vegetable snacks, instant pudding, etc. that can be measured, mixed and eaten in a short time period. Varying numbers and unexpected groups of participants can wreak havoc on a program such as this, so substitutions/extra ingredients are kept on hand (crackers, juice, etc.) for large crowds.

Many parents are leery of letting their children help in the kitchen. Children take more time to accomplish simple tasks, and usually make a bigger mess while doing them. But many of these same parents are surprised at the skills their children can pick up quickly: cutting (plastic knives for really young children), peeling, measuring correctly, pouring and mixing. Children love to make and eat (and sometimes share) their culinary creations. Parents are sometimes amazed that children will try foods they never touch at home or later ask to make a recipe they made at the museum. Taking their finished product home is expected, whether

it's in their tummies or in their hands via museum-provided plastic sandwich bags.

As with all museum programs, children and their adults are gently told that the children get to do it all by themselves-adults may only repeat or clarify directions. Yet parents and teachers are still apt to jump in and do things for the children who may work slowly or spill things in the process. These adults are offered a suggestion: keep their hands behind their backs to keep from pouring or measuring for their children.

Three unanticipated initial problems with Wacky Wednesday programming were 1) children with food allergies, 2) cooking/baking time and 3) keeping sufficient supplies on hand.

Parents are now asked at the door if their children have any food allergies and can choose not to participate if recipe ingredients will cause a problem. Food allergy information, collected from campers at registration, is used in menu planning. Recipes that contain common allergens, such as peanuts, have been revised using wheat germ

Working assembly-line fashion, children move from left to right, from one clearly marked step to another, to make fruit pizzas. For large groups, both sides of the table are used.

If children are reluctant to try foods, they are encouraged to "try one bite" or try a new combination. Sometimes, just watching everyone else-and getting a little peer pressure-is enough to get them to try it.

or crushed cereal in place of nuts.

Cooking/baking time is usually not an issue, but even a five-toten-minute wait can be too long for large groups. Recipes that need cooking have been eliminated during high traffic months. During the quieter months, parents are willing to wait for their children's creations to finish cooking/baking. During summer camps, even individual pancakes can be made since there is plenty of time to add toppings (fruit, jam, butter and syrup), eat one and mix the next pancake in

> between cooking each one. Several electric frying pans or griddles are constantly in use to keep the pancakes coming.

> Supplies are purchased close to program days. In the absence of scheduled groups, supplies are prepared for up to twenty-five children. Basic supplies are kept on hand in case of unexpected changes or large groups. Since this is a walk-in program, the number of participants can vary greatly. With extra supplies on hand, recipes can be changed at the last minute, even right before the intercom announcement inviting people to come cook.

> If children are reluctant to try foods, they are encouraged to "try one bite" or try a new combination. Sometimes, just watching everyone else-and getting a little peer pressure—is enough to get them to try it. Asking kids to share their favorite food ideas offers an opening for suggestions from staff. A variety of fruits and vegetables is usually offered so children can find something they like.

REPLICATION TIPS

The Wacky Wednesday cooking program is scalable: it can be used to provide snacks for small visiting Scout programs, out-of-school camps (twenty to sixty kids daily) and even large events (500+ children). The more children there are, the more organization, staff and work stations are needed to supervise each step to make sure children follow the directions and finish in a reasonable period of time. At any level, it is still much easier than staff making snacks for visitors and much

more fun for the visitors to make their own.

STAFFING

This program can usually be presented with one staff member, although two trained staffers can provide extra hands for large crowds, adequate coverage for vacation/sick time and, of course, two heads for creativity. During the summer months, teen volunteers are used with supervision by a staff member.

PLANNING

Recipes and menus are selected at least one month in advance, incorporating holiday or monthly themes, seasonal foods and new ideas. Before purchasing supplies, calendars are checked for large group visits, school holidays and anticipated admission numbers. Back-up supplies are kept for emergencies or substitutions.

STARTUP SUPPLIES

Minimum supplies to start a cooking program include the following:



• plastic mats or trays to contain ingredients and catch spills

• **two-cup measuring cups** with handles (used as pitchers for liquids)

• smaller nested measuring cups

• measuring spoons as individual portions use spoon measures more than cup measures. It is essential to have the correct measuring cups and spoon sizes for each child. A popsicle stick for leveling spoonfuls teaches the children how to measure correctly.

• **simple recipes** divided into step-by-step directions for a single serving

• disposable plates, cups, bowls for individual servings

• plastic forks, spoons, knives for mixing, cutting and eating

• toaster oven, microwave, blender, electric frying pan,

hotplate and mixer can be used for some recipes, although they are not essential for startup.

SET-UP

A dedicated room with a sink for easy clean up is ideal, although the program has been successful in an open area with a cart.

Adjustable height tables: Pushed against a wall, they ensure that children follow the steps in the right sequence. Busy days require two table set-ups. Very busy days use a two-sided assembly line on both tables to conserve space and keep the crowd moving. A separate eating area nearby with tables and chairs is also provided.

Direction cards: Each recipe is divided into one-step directions for each ingredient. Laminated direction cards (8.5" x 5.5") include both pictures and words for the ingredient and a drawing of the measuring spoon/cup. Cards are placed on the mat/tray with the measuring cup or spoon on top of the picture, along with the ingredient. If a recipe calls for more than one spoonful/cupful of an ingredient, the correct number of spoons/cups is drawn on the direction card, and the same number of spoons is placed on the direction card. Children fill all the spoons, placing each on the mat, then empty them one by one into their own bowl/plate.

Welcome: Upon entering the program room/area, children are reminded to wash their hands before preparing/eating food. If the program is in an area where the bathroom is inaccessible, or if large groups make it inconvenient, sanitary hand wipes are provided.

Left to right progression: Containers (plates, bowls, cups) should be at the beginning of the line. If children need to write their name on their container (for baking or cooling), labels or tape and markers should be there, too. Direction cards and mats are placed in the correct order of the recipe steps in a left-to-right sequence, reinforcing reading readiness skills.

Ingredients: Small, covered containers of sugar, flour or other frequently used items make set-up and clean-up faster and easier. If smaller containers are used for recipe ingredients, the original packages are placed behind the container so the contents are recognizable (flour and sugar in bowls can look identical to small children, but flour and sugar bags are distinctive). Vegetables and fruits are pre-washed and cut for recipes that combine ingredients.

Measuring and mixing: Parents are encouraged to *let the children* measure and mix their own ingredients. Spills are easily caught on the mats/trays. Children are more apt to try something they actually make themselves. A staff person at the end of the table can supervise all children and recipe ingredients at the same time, repeating directions as needed.

Cooking/Baking: If recipes need baking, provide enough toaster ovens or microwaves for multiple children's food to be cooked simultaneously. A small paper with the child's name stuck under a

cookie edge, or a name on foil keeps children's food identifiable. Use "no-cook" mix-and-eat recipes if large groups of children are scheduled.

Clean-Up: Children are encouraged to use their napkins, clean up their own table space, collect their garbage and throw it away and wash their hands (again!) before going back into the museum.

Take-Away: As they leave the cooking program, parents receive a small card with the following information:

CUP COOKING WITH KIDS*

Individual portion recipes enable children to measure, mix, manipulate and consume one portion. Following picture steps enables children to proceed with a minimum of adult guidance (children can "read" the directions) as they move from left to right to complete the steps. Cup cooking also reinforces the following knowledge and skills:

- Science: observing, measuring, predicting
- Math: numbers, measuring, fractions
- Reading: language, sequencing, directions
- · Food Prep & Nutrition: food groups, healthy foods

Cooking can and should be fun. Children need to explore food and discover new and interesting foods. Creating something good to eat is a rewarding experience for a child.

*adapted from Cup Cooking by Barbara Johnson & Betty Plemons, © 1978 Polk Association on Children Under Six, distributed by Gryphon House Inc.

Resources and Recipes

Cookbooks

Cup Cooking by Barbara Johnson & Betty Plemons, © 1978 Polk Association on Children Under Six, distributed by Gryphon House Inc.

Kinder-Krunchies by Karen S. Jenkins © 1982 Karen S. Jenkins, distributed by Discovery Toys

Alpha-Bakery © 1987 General Mills, Inc.

Favorite Recipes

Pancakes

In a 3-5 oz cup, mix:

- 1 Tablespoon pancake mix
- 1 Tablespoon water

(Or use 2 Tablespoons of each for a larger pancake)

Stir until well mixed.

Cook on griddle or in electric frying pan.

Fruit Pizza

1 graham cracker

Vanilla low-fat yogurt

Sliced fruit—bananas, strawberries, blueberries, etc Spread yogurt as pizza "sauce" on graham cracker. Top with fruit (fresh, canned, frozen) and enjoy!

Spinach Wraps

- Fresh raw spinach
- Cream cheese (or low-fat cottage cheese) with a few herbs added for flavor
- Wheat germ or crushed cereal

On each spinach leaf, children spread a little cream cheese or cottage cheese, add some crunchies and roll up to eat.

ith a grant from Blue Cross Blue Shield (BCBS) of Florida, the Miami Children's Museum (MCM) created a weekend dropin program that combines the cultural and the healthy aspects of food. In October 2007, the Kids Cooking Club was born.

Held monthly, the Cooking Club covers a different culture and its food each time. It has experimented with foods such as yucca, hearts of palm, eggplant, cabbage and mangos and has recreated recipes from Mexico, China, France, India and South Africa. In addition to cultural cooking classes, other food-related and locally relevant topics are on the menu:



Working from a portable cooking cart on the museum floor, a visitor cooks up a colorful batch of peppers.

Food + Culture: Kids Cooking Club

Miami Children's Museum Miami, Florida

Danielle Black, Manager of Public Programs

• Hurricane Food: how to eat healthily from canned foods;

• Grilling 101: how grilling can be a healthier way of preparing food;

• Back-to-School Lunches: how to create a healthy lunch; and

• Farmer's Market: how kids can learn to pick out healthy foods and create their own healthy recipes.

The museum does not have a functional teaching kitchen; therefore, this program is run from a self-contained, mobile cooking cart that can be wheeled anywhere in the museum. The cooking class is usually held in the museum's auditorium, but sometimes it takes place in one of its classrooms. Children work on three tables set up in a semicircle around the cart, while their parents sit on chairs behind them. The cart is equipped with two burners, a conventional oven, a blender and food processors as well as other cooking accoutrements such as mixing bowls and spoons. Because this is a weekend drop-in program and is open to all guests, there is no fee for participating. There is, however, a limit to the number of children able to participate (approximately twenty to twenty-five/class).

The Cooking Club is interactive and hands-on. Each child has a job and participates in some way in creating the final dish, whether it be pouring in milk or cutting up vegetables. In a *children's* cooking class, children do all the work and the parents are only there to supervise. Although there is no age limit for participation, children are broken up into age groups, making it easier for the instructors to pass out jobs. Older children cut and chop, with supervision of course, while the young ones pour and mix.

Before beginning, children wash their hands and repeat this process periodically throughout the rest of the program. When everyone has clean hands, the instructors begin talking about the recipe, what foods they will be using and the recipe's country of origin. They review the jobs that need to be done and divide them up among the participants. Then they create the dish.

During the process, instructors provide the children and their parents with fascinating facts about each country as well as handouts such as maps and, of course, the recipes themselves. With Miami such a diverse community, the cultural importance of different foods is emphasized while trying to make some traditional dishes in healthier ways. The class has made recipes such as ratatouille (France), grilled yucca (South American countries), mango chutney (India), mango lassi (India) and dumplings (China).

After the food is prepared, the young cooks and their parents sample them right there. Although they have the option of taking their full portions home, they usually eat them before they leave the museum. Children are asked how it tastes. Grilled steak with balsamic vinaigrette has been a crowd-pleaser, but ratatouille was not a hit among young pal-

ates. When they make healthier versions of traditional dishes, such as grilling yucca instead of frying it, they don't seem to notice a difference in taste. Parents' opinions of the food are also sought, and they are asked if they will try this recipe—or this healthy new version of an old recipe—at home. Typically, everyone enjoys the food and states that they will try it at home.

In order to help families do that, flyers are given out at the end of the class. They contain the class recipe, interesting information about the foods and their cultures of origin and Web sites that list even more healthy recipes. This makes it easier for children and parents to have increased access to the information necessary to put these new healthier practices to use in their own kitchens.

The Museum and Its Health Focus

Miami Children's Museum is dedicated to teaching children a healthy lifestyle through a love of play. MCM was established in 1983 and opened its new building in 2003. This 56,500-square-foot museum, located on Watson Island, near downtown Miami, offers

both the space and the location to become a town center to all of Miami's diverse families. Its fourteen galleries of interactive exhibits and programs are guided by research-based models that promote child development through fun, interactive and authentic learning experiences.

Messages about the many different aspects of healthy living are woven among the exhibits. For instance, in the interactive supermarket, there are opportunities for children to shop for healthy foods and create their own meals. Using Since the museum does not have a functional teaching kitchen, this program is run from a selfcontained, mobile cooking cart that can be wheeled anywhere in the museum....Since Miami is such a diverse community, the cultural importance of different foods is emphasized while trying to make some traditional dishes in healthier ways. shopping carts and baskets, children choose foods off the shelves. Attached to the carts are healthy recipe cards and with these cards children can shop around for the right foods to make these recipes. The *Food Pyramid Diner*, part of the museum's health and wellness exhibit, shows children all the components of a healthy meal. Using a computer program and scanner, children place "food" on a tray and scan the tray to see where the meal components fit among the categories of the food pyramid.

In addition to its exhibits, MCM promotes healthy eating in all its programs. For early childhood programs, afterschool programs or special events, snacks such as fruits, vegetables or other healthy alternatives are provided.

Educating children and families about healthy lifestyle choices is not a "flavor of the month" at MCM. It is a pervasive theme throughout the entire museum. However, there are additional museum themes, such as the importance of promoting cultural awareness within the diverse Miami-Dade community, that remain strong and fortunately blend harmoniously with programs such as the Cooking Club. The Cooking Club is a key part of MCM's commitment to promoting healthy life choices for children, but it's also a subtly effective way to convey multiple positive messages to visitors of all ages through fun and interesting experiences with food.

The Cooking Club was initially developed to meet a grow-

ing need to learn—or perhaps relearn—about healthy cooking and alternatives to processed food. With an increase in childhood obesity and diabetes, MCM recognized a problem that needed to be addressed by all organizations that serve children. The museum is one of a few local organizations that offers this type of program and at this writing, is the only museum in Miami-Dade County with a cooking program.

According to 2007 statistics from the National Center for Chronic Disease Prevention and Health Promotion's Youth Risk Behavior Surveillance, overall the prevalence of obesity is higher among African American and Hispanic students than among white students. The cultural eating habits of these groups-which often promote larger portions high in carbohydrates and fat-combined with the current American lifestyle of affordable fast food, frequent snacks and sedentary activities, have created a dangerously unhealthy equation. According to Action for Healthy Kids, a watchdog group, the consequences of this are vast and wide-ranging, including childhood diabetes, risk factors for heart disease and costly medical expenses.

Children in Miami-Dade County are even less likely to have health insurance than children in



Using knives, the girls prep mangoes for the salsa.

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promoting healthy life choices for children, but it's also a subtly effective way to convey multiple positive messages to all visitors through fun and interesting experiences with food.

other parts of Florida or throughout the United States (Department of Health Services Research, 2005). In 2004, 16 percent of children under the age of nineteen in Miami-Dade County lacked health insurance (Department of Health Services Research, 2005). Children without medical insurance have a much greater need for information on exercise and healthy eating habits because they have less access to preventive medical care. Despite these facts, many Miami-Dade County schools have significantly cut their physical activities budgets. Fun physical activities such as culturally relevant forms of dance, cooking clubs and family events are needed to attract and retain this audience. Likewise, nutritional education must take into account cultural food preferences and affordable options.

Kicking Off the Cooking Club

In response to this situation, staff created the Kids Cooking Club and looked for a sponsor to help with program costs. Since MCM had worked with Blue Cross Blue Shield of Florida in the past, it seemed natural to ask them for support. With their generous donation, MCM was able to purchase more cooking equipment as well as provide maintenance for its cooking cart, pay the instructors, buy food supplies and market the program. As the museum already had a cooking cart from previous cooking demos and fee-based classes,

> funds were used to replace old or broken equipment, buy more pots and pans and repair the cart so it was in top working order.

> With funding in place and newly refurbished equipment, MCM next contracted with two cooking instructors, Kathleen Duran and Bonita Whytehead, and worked with them to create the program's core curriculum. It was decided which countries and foods would be highlighted and a schedule was determined, taking into account the relevant cultural holidays throughout the year.

> Through trial and error in the first couple of classes, MCM learned what worked and what didn't. One of the first problems that arose was the attention span of the children. Each class lasted about forty-five minutes to an hour, but if there weren't enough jobs for each child, children would get restless and lose interest. To fix this, we tried three things: 1) recipes that took less time to make; 2) recipes with more steps so everyone got a job; and 3) multiple simple recipes in one class, again creating more tasks so each child stayed busy.

> Another issue was the need for a consistent pattern for the way in which the class would be run. For instance, does the class start with a lesson on the culture being covered or is the culture discussed as we cook? It

was eventually decided that in order to capture and retain everyone's attention we would explain the cultural aspects of the recipe and the food as we created it.

In funding the Kids Cooking Club, BCBS of Florida's goal was to create a program that combined different cultures and healthy eating. To see if this goal was being accomplished to their satisfaction, a BCBS representative participated in a class along with his children. After the class, the BCBS rep offered some suggestions such as capping the number of attendees per cooking session and adding another instructor. All in all, with these suggestions and observations of our own, it took about three months to work out all the kinks.

Program Impact

The relationship between BCBS and MCM has strengthened due to the success of the MCM Kids Cooking Club. Since its inception in October 2007, more than 300 families have been served by this program and the number is growing. Because children and parents find the program so much fun—and delicious—they continue to come back month after month.

Even with its initial success, MCM Kids Cooking Club is still a work in progress. Museum staff is working on formal pre-test and post-test surveys to track program outcomes. Both informal evaluations and surveys have been done by staff as well as the sponsor. During and after each program, MCM staff and the cooking instructors ask participating parents and children what they thought about the program and its content. The information collected has led to minor changes in the program such as having multiple sessions and creating recipes that increase the amount of child participation even more.

After the program's one-year anniversary, MCM compiled a formal evaluation and final report in order to evaluate effectiveness and outcome success. This process will be repeated annually throughout the life of the program. In September 2008, BCBS extended the MCM Kids Cooking Club funding for another year at the end of which the program will be jointly evaluated by BCBS and MCM before a decision about continuing its funding is made. Even without a continuation of funding, MCM Kids Cooking Club will continue. It has become a cornerstone of MCM's educational plan and is a great addition to the museum's health and fitness programs.

REPLICATION TIPS

A program like the MCM Kids Cooking Club is easy to add to any museum's educational plan. With an increasing awareness among everyone to eat healthier, a children's cooking club is an easy way to teach children from a young age about healthy foods and recipes. It also provides guidance for parents on how to prepare food in healthier ways.

PROGRAM CREATION

Create the core program by answering these important questions:

• Do you want to do a demonstration or an interactive class?

• Do you want to make just healthy recipes or include a cultural foods aspect?

• Do you want it to be just for children or do you want to teach parents and caregivers as well?

SPONSORSHIP

Depending on the museum and its budget, finding a sponsor

helps to underwrite expenses and build support. This type of program can be attractive to many kinds of sponsors, and it can be scaled according to their needs and budget.

EQUIPMENT

Whether it is a mobile cooking cart or a teaching kitchen, a museum must have the ability to cook! Without the necessary equipment already on-site, there may be some significant start-up costs involved.

INSTRUCTORS

Of course, you want an instructor who knows how to cook, but it's really important that the cook is comfortable working with children and families in a friendly, teaching capacity. There are multiple sources for cooking instructors. You can contract with a particular cooking instructor from a local cooking school and use that person for every class. Or you can contact local restaurants and see if they might be willing teach a demonstration or a class to children. There is also the possibly that someone on a museum's staff or among its core of volunteers is secretly a great chef and is willing to run your cooking program!

LEARNING MATERIALS

It is important to provide families with the tools to continue the learning at home. Create an informational flyer for each class that includes recipes covered in class, plus information about other sources of healthful information, such as Web sites, free publications and other resources.

MARKETING

Create a specific logo or sign to use to indicate that this special class is held on a regular schedule. Cooking programs are very easy to market and generally draw a great deal of interest.

THINGS TO LOOK OUT FOR

Program planning and marketing may go smoothly, but the challenges usually show up in the actual implementation of the class itself. Some things to be aware of include the following:

• Attention spans: Because not all of the prep jobs happen at once and not all children are working at the same time, boredom quickly sets in. This problem can be solved with an engaging instructor or multiple instructors. One instructor can combine all of the ingredients and do the actual "cooking" while a second instructor talks to the children to keep their attention.

• **Crowd control:** Another challenge, surprisingly, is the popularity of the program. Sometimes there are too many children participating at once and not enough jobs. In order for the children to enjoy themselves, it may be necessary to break the program into two time slots. Or maybe hold the cooking program more than once a month and limit the number of children who can participate in each class. A good rule of thumb is to have no more than ten children per instructor in each class. A higher ratio than that can hurt the learning experience for all the children in the class.

The MCM Kids Cooking Club has proven to be a good addition to the museum's goal of providing healthy programming for children and their families. Through it, children learn to take an active role in living healthier lives. By providing the recipes and the facts, parents become more involved in creating healthier eating habits for their children and themselves at home.

Healthy First Saturdays: Developing a Health Fair Program

Port Discovery Children's Museum Baltimore, Maryland

Nora Moynihan, Director of Education and Community Enrichment Jennifer Sparks, Community Enrichment and Development Liaison

t is no secret that most children look forward to the Saturday morning routine of grabbing a Pop-Tart and sitting on the couch to watch cartoons. But at Port Discovery Children's Museum, children can use that same time to burn calories and learn how to make healthier decisions in a world based on convenience—and still have fun and play in the process! The museum's Healthy First Saturdays, a health fair program held on the first Saturday of every month, is a cost-effective, community-based program. Its primary focus is on teaching children and families about health in a fun environment and for the price of general museum admission.

Why health fairs? Health is an important issue—possibly the most important issue—for all children and their families. Many children's museums include health goals in their mission statement either explicitly or implicitly. Some children's museums have health exhibits or spaces dedicated to health-themed programs. Designing new exhibits or launching new programs can be a big and costly undertaking, but a health fair program is an inexpensive, family-friendly activity that any children's museum can create.

No museum can afford to do all of the things on its wish list, and nowadays the funding community is more competitive than ever. The key to the success of a health fair is community involvement: museums bringing people from the cultural, health and business communities together to think about an issue that affects everyone. In addition to producing a stronger program, the joint effort builds capacity. It attracts invaluable resources to the children's museum: new partners who bring to the museum their internal resources (staff, expertise and printed materials), potential gifts (both in-kind and monetary), networking opportunities and expanded publicity avenues. Strong partnerships that develop during one program can become even stronger assets for future programs and events.

Program Overview

Healthy First Saturdays at Port Discovery include three ma-

The key to the success of a health fair program is community involvement: museums bringing people from the cultural, health and business communities together to think about an issue that affects everyone. In addition to producing a stronger program, the jor components: free play within the exhibits, resource booths and healthy programming. With more than twenty partner agencies on a rotating schedule, each Healthy First Saturday is a new experience because the program content depends on the partners in attendance that day. The ever-changing program encourages repeat visitation. The following is a typical Healthy First Saturday menu.

Free play within the museum exhibits

Children can climb in the threeand-a-half story urban tree house, play a game of soccer on the indoor field and



Drumming is always a popular activity with participants of all ages.

dance to oldies playing on *The Diner's* jukebox. The Health Corner, sponsored by the program's founding partner Baltimore Health Care Access, is filled with toys, books and other materials that encourage discovery about the human body. Guests can stop by and weigh themselves, then put on a weighted vest to experience the feeling of gaining twenty-five pounds. Port Discovery loans pedometers to families who want to take the Kidworks Challenge, a fun quiz that challenges guests to record their number of steps throughout different areas in the museum.

"Come and Do" Resource Booths

Community health partners do not just set up tables and hand out pamphlets. They facilitate activities that promote an understanding of important health topics. The Howard County General Hospital engages visitors in an activity focusing on portion control in which children use plastic food to learn how to visualize amounts needed daily from each food group. At the Baltimore Health Department resource booth, children can take their caregivers' blood pressure with the assistance of a health educator. Families can step into the lead-free house to learn about the risks of lead (a local health concern in Baltimore). The possibilities for resource booths are nearly endless and at Port Discovery include immunizations, the dangers of tobacco, healthy eating and caring for teeth.

Healthy Programming

Programming, the strongest and most well-attended component of Healthy First Saturdays, keeps guests coming back for repeat visits by introducing them to new activities in fun formats. What follows is not a complete list of the activities that take place each month, but a sample of the types of organizations involved.

• **Drum Circles:** Jonathan Murray, founder of FunDrum Rhythm Circles and the Rumble Club in Baltimore, facilitates two drum circles on every Healthy First Saturday. His sessions give children, families and the community the chance to play instruments, interact with each other and exercise their minds and bodies. Drum ming, while stimulating cognitive learning and requiring attention, perception and memory, has also been shown to release endorphins in the brain, which produce positive effects on emotional health.

• **Exercise Programs:** Various exercise programs and classes are offered throughout the day. Family yoga sessions promote flexibility. Middle Eastern movement (known in some circles as belly dancing) encourages participants to move to the groove while burning calories. Emmy-award-winning Pam Minor-The Kindersinger leads singing and dancing through music and puppetry around themes of nutrition and exercise.

joint effort builds capacity.

• **Cook and Tell Classes:** In this hands-on cooking and literacy program for children, presented in cooperation with Whole Foods Market and the American Heart Association, kids get to be chefs and create healthy snacks (with help from American Heart Association volunteers). The program takes place in *The Diner*, a permanent, Route 66-themed exhibit, where during the activity a Port Discovery staff member reads an accompanying story. For example, on one Saturday, the children made Ants on a Log, consisting of celery, soy butter and raisins and listened to a reading of the book *One Hundred Hungry Ants*.

• Fidos For Freedom: This therapy and assistance dog training organization attends every Healthy First Saturday with four to eight owners and their trained dogs. Fidos For Freedom, Inc. facilitates therapy and assistance dog demonstrations to educate the community on the role of working dogs. Volunteers also teach guests about safe interaction with dogs.

REPLICATION TIPS

EXAMINE MISSION, MUSEUM AND COMMUNITY

Focus on your museum's mission. Port Discovery's mission is to provide experiences to guests that ignite imagination, inspire learning and nurture growth through play. The museum strives to provide programs and exhibits that address different learning styles and utilize each child's individual gifts in an effort to build a community of lifelong learners.

To support its mission, the museum instituted five platforms of learning—the organizing principles around which all of the internal decisions for programming, exhibit development and environments are designed. The five platforms are Early Childhood, Financial

Literacy, Arts and Culture, STEM (Science, Technology, Engineering and Math) and Healthy Families-Healthy Communities. Healthy First Saturdays, the core program that supports the fifth platform, began in September 2005 after several years of hosting a shared outdoor festival space with the Baltimore City Health Department.

Scrutinize your museum's building and grounds. Make an inventory of the physical structures and exhibits that can be tapped for a health fair program. Use this inventory to visualize the types of potential partners that could best utilize each space. The counter of a grocery store exhibit is a wonderful venue for a healthy cooking class from a local organization. An outdoor space makes a great healthy food garden demonstration space by local gardeners or farmers.

Finally, scan the community and look for relevant topics related to local issues that can be addressed through a program. Childhood obesity is a growing risk factor across the country. In its 2003 policy statement,



Healthy First Saturday participants are gently introduced to one of the working dogs from Fidos For Freedom, Inc.

Healthy First Saturdays is an example of true community development: examining community needs, bringing organizations together and creating a program to bring about positive changes. This exercise in community enrichment and partnership is not only encouraging healthy families and healthy communities, it is encouraging a healthy relationship between the museum and the community.

the American Academy of Pediatricians (AAP) outlined multiple risk factors for childhood obesity and weight concerns. Healthy First Saturdays responds directly to three primary risk factors: 1) the increase in sedentary leisure activities, 2) the lack of safe places for physical activities and 3) poor food choices, especially in low-income communities. To respond to the AAP's concerns and other health issues in the local community, Port Discovery turned to relevant local organizations to join in the development of a monthly health program.

COMMUNITY PARTNERSHIPS

Once the museum has a clear vision for a health fair program, reach out to relevant organizations. In Baltimore, the health department became the primary point of contact because of our pre-existing relationship, however there are many community health organizations that can be contacted.

Your local health department is a great resource to help identify the specific health needs of the community. Each office within the health department is mandated to perform community education to spread its message about health and wellness to the target populations they serve. They want to reach families with small children, so it is mutually beneficial for the health department to partner with a children's museum. The children's museum environment is comfortable, fun and inviting for guests and health educators. This partnership benefits everyone: it gives the museum new resources, it gives health educators a pleasant venue in which to reach their target audience and it gives museum guests access to information and resources in their community while having fun! Meet with your health department to discuss the possibilities and obstacles. Visualize what an exciting children's museum health fair would look like, and get the health department to see it too.

Write a community partnership agreement that identifies what

will be accomplished, who will provide needed resources, which person will be responsible for particular tasks and the deadlines for each step. At Port Discovery, the agreement is broken down into months: what date partners are coming to the event, what hours, what and who they need to bring, and what we need to supply. The agreement acts as a contract that keeps the program clear and organized. In addition, it helps to prevent miscommunications and unrealistic expectations between partners and the museum. As a partner is added to the program, create a separate agreement. It is important to know and articulate the goals and needs of the organization and whether those goals and needs are compatible with the museum. (To view a sample community partnership agreement, please contact the authors at Port Discovery or the Association of Children's Museums.) Partners will support an organized program that has clear expectations.

STARTING AND EXPANDING THE PROGRAM

The development of any program involves time and patience with community partners. Once the health fair program is launched, invite new potential partners to the health fair to see what they have been missing. It is not bad to start small.

The first year of Healthy First Saturdays began with two partners, both large organizations—Baltimore Health Care Access and Whole Foods Market—and a basic format of informational booths and cooking classes. At the end of that year, after museum staff and the partners reviewed and revised the program, all parties agreed it could promote more than just physical health and nutrition. It could also educate the community on mental and emotional health, safety and healthy communities.

Based on this feedback, Port Discovery added new partners and new healthy programming the second year. Fidos For Freedom joined to demonstrate how dogs help people with disabilities and to introduce children to canine safety. Imagine the surprise and delight of children when they saw a 220-pound English Mastiff lounging around inside the museum! Community health teachers came to lead family yoga classes; families loved learning how to breathe like a snake for relaxation.

Additionally, museum staff decided to change what began as information tables to "Come and Do" resource booths. New partners were asked to go beyond offering the free handouts and provide educational booths that included engaging children in an activity while caregivers received the information they needed.

RISKS OF RELYING ON COMMUNITY PARTNERSHIPS

Partnering always includes the risk of disappointments and setbacks: small organizations come and go, staff changes, cars break down or miscommunications occur. Partnership agreements help reduce the number of setbacks but the risk remains.

At the end of the second year of Healthy First Saturdays, Port Discovery's partners had increased from three organizations to ten, but the museum encountered setbacks. Whole Foods Market, no longer able to furnish a chef for the cooking classes but still committed to the process, offered to continue donating the food to the program. The American Heart Association moved into the role of facilitating the healthy cooking with trained nutritionists, free heart healthy cookbooks and an enthusiastic and hardworking staff. The cooking class was saved, a new committed partner was added and an old friend stayed in the loop.

Sometimes a temporary setback can be a great opportunity knocking at the door. The community will aid a program in which they feel invested when a setback occurs. In many cases, museum guests are associated with community partner organizations—they bring their own children to the museum. They are committed to improving their neighborhoods and the institutions within the community. Today's museum guest may be tomorrow's community partner. Healthy First Saturdays partners come from for-profit and nonprofit organizations. There is no difference between working with other nonprofits and working with for-profits. All organizations and businesses have the same issues: time, budget and staffing constraints. Everyone comes together for mutually beneficial reasons; partnership agreements will help to keep all parties on the same page.

PROGRAM EVALUATION

After four years, Healthy First Saturdays is considered a success for the museum and the community. To evaluate its strengths or weaknesses, museum staff examine changes in monthly attendance and in the number of community partners. In September 2005, the inaugural Healthy First Saturday attracted 884 guests; a year later, 1,735 guests attended. In December 2005, when the museum was able to offer a \$1 admission price for that month's health fair, 3,753 guests attended. This prompted the museum to seek funding for a free access program that would open the doors to underserved families. Currently, visitors to Healthy First Saturdays pay regular museum admission.

The number of community partners has also increased. From the initial two primary partners, the monthly health fairs now include more than twenty agencies and organizations that attend several times throughout the year, including: Baltimore Health Care Access, the American Heart Association, Fidos For Freedom, Inc., Whole Foods Market, Baltimore City Fire Department, Baltimore City Health Department and Stroller Strides of Baltimore. The growing list of partners encourages new organizations to join the program. The next stage of program evaluation is to implement guest surveys to assess satisfaction and determine whether the health fairs are successfully conveying their intended health messages.

Larger Implications

Using the Healthy First Saturdays program as its base, Port Discovery staff developed a larger mission-driven health initiative. In 2008, in response to the success of Healthy First Saturdays, the Health Advisory Council was formed to meet the need for the local community to work together on health issues. Chaired by the commissioner of the Baltimore City Health Department, the members of the Health Advisory Council include representatives from the American Academy of Pediatrics, the Governor's Office, Johns Hopkins University and The University of Maryland Medical System.

In addition, the Healthy Families-Healthy Communities initiative is beginning to attract attention from foundations and special sponsors, including a national corporation interested in sponsoring a permanent health-related exhibit. The American Heart Association, in its second year of partnership at Healthy First Saturdays, invited Port Discovery to host the 2009 Worldwide Day of Play! Successful community partnerships often bring additional and unexpected resources to the museum.

Healthy First Saturdays is an example of true community development: examining community needs, bringing organizations together and creating a program to bring about positive changes. This exercise in community enrichment and partnership not only encourages healthy families and healthy communities, it encourages a healthy relationship between the museum and the community.

he Discovery Center at Murfree Springs (DCMS) opened in 1986 in an old Victorian house about twenty miles outside Nashville. The Health Room, one of its first permanent exhibits, focused on role-play and included an exam table, x-rays, crutches, stethoscopes and related doctor and nurse supplies. Annual events such as Stay Fit and Healthy Day and Love Your Teeth Parties were held. Weekly Parents and Tots programs engaged caregivers in learning about nutrition, health, safety and other family health concerns. Health education was central to the center's mission from the beginning.



A young visitor gets her blood pressure checked as part of the prescreening process for participation in Discovering Healthy Families.

Discovering Healthy Families

Discovery Center at Murfree Springs Murfreesboro, Tennessee

Rachel Anderson, Director of Education and Visitor Services

Vanderbilt-trained pediatrician Dr. Joe Little, a key founder of the museum, worked closely with museum staff to incorporate health and nutrition into daily activities.

Step Into Fitness

In 2002, DCMS expanded into an 18,000-square-foot facility adjacent to twenty acres of wetland habitat accessible through a system of boardwalks. As the museum prepared to move to the new building, it received a grant from the Nashville-based HCA Foundation, a giving arm of the TriStar Health System, for a program called Step Into Fitness. The grant had three components: 1) a school tour focusing on nutrition and fitness, 2) fitness tips posted throughout the museum and 3) outdoor tips that encouraged use of the boardwalk. Part of the school tour encouraged students to make nutritious snacks, create exercise routines and control portion sizes. The new building also contained an expanded health exhibit similar to the original *Health Room*, but the new one was located beside a fully equipped kitchen. An excellent location for hands-on cooking activities, including weekly healthy snack programs, the kitchen became a central focus of the new museum.

The new museum, which serves about 100,000 visitors a year, includes typical children's museum exhibits (water table, art room, cultural area, playspace for infants) mixed with unique spaces that stem from community influences (Tennessee live stream table, historical fire engine and the outdoor wetlands). But overall, about 20 percent of the museum's programs and exhibits had a health and nutrition focus. In 2005, however, a new study revealed Tennessee's obesity epidemic, rating the state third highest in overweight children nationwide. This did not surprise staff. In fact, it was one of the reasons why nutrition and general health were a part of the museum's mission since it opened. But the statistic prompted further research. It was discovered that in the past twenty years, obesity rates had climbed from 10 percent to nearly 30 percent in Tennessee according to the

Centers for Disease Control. Stunned by the skyrocketing rate of change, staff began to wonder how effective, or ineffective, their health-related exhibits and programs actually were at changing behaviors. At the same time, Dr. Tom Brinthaupt, psychology professor at Middle Tennessee State University (MTSU) and a regular docent at the center, contacted the museum about writing a research grant to expand some of DCMS's current health programming. Specifically he was interested in assessing the guided Step Into Fitness school tour.

Based on Brinthaupt's familiarity with obesity interven-

tion research, he suspected that information about healthy habits that children learned during one-time school field trips to the museum either did not make it home or did not last at home. He explained, "It was unrealistic to expect that children can change their parents' foodbuying and meal preparation habits. There are major time constraints placed on most families, such as homework and extracurricular activities. Efforts to change behavior will likely create additional demands on already overloaded children and parents, possibly meaning that they will have to sacrifice something. Children who had participated in the Step Into Fitness program might find that their parents could not adopt a new exercise and nutrition approach for their children (e.g., due to time constraints or resistance to lifestyle changes)."

In short, was the Step Into Fitness program doing anything to affect the high rate of overweight children in the Murfreesboro area? The answer: probably not.

The good part about Step Into Fitness was that it did provide a fun and engaging way to reinforce healthy concepts. Teachers and

students really enjoyed it. But to actually tackle the barriers to improving eating and physical activity, the entire family needed to be involved in an in-depth program. Museum staff, with Brinthaupt's help, wanted to create a program that would encourage parents and children to spend more time as a family preparing healthy meals, eating together and engaging in physical activities. But how, exactly, could DCMS and MTSU address this problem? What kind of program would be feasible? What other partners should be involved?

...single experiences are usually not enough to overcome the many barriers to permanently improve eating and fitness that families struggle with every day. Discovering Healthy Families provides a new approach to tackling this difficult issue by focusing on the entire family through an in-depth program that involves repeat participation and coaching support.

Program Development & Partners

Because of the center's twenty-year commitment to health, many of the resources needed for the DHF program were already in place (hands-on activities, kitchen, healthy recipes, etc). But the museum needed partners, including dietitians, nurses and other health organizations. Changing behavior—especially health-related habits—involves so many psychological, social and attitudinal barriers that they needed to find people with expertise in these areas.

DCMS board member David Nicely, vice president of operations at StoneCrest Medical Center, also served as board president for the regional chapter of the American Heart Association (AHA). He was a key partner in establishing the initial groundwork that connected DCMS with health professionals from both organizations. The AHA regional director, the clinical dietitian at StoneCrest and the director of physical medicine there all served on the DHF development committee and assisted with training, finding volunteers and identifying healthy practices. With the assistance of the DHF committee,

DCMS staff designed the pilot program, created a detailed logic model, orchestrated logistics and secured funding from the HCA Foundation. Brinthaupt and MTSU provided evaluation and, most importantly, a continuous stream of health coaches. Initially the plan was to recruit "family health coaches" from members of the health community, however, Dr. Lisa Sheehan-Smith, a registered dietitian and MTSU department of human sciences professor, agreed to involve her students as part of their curriculum for a seniorlevel medical nutrition therapy course.

The DCMS offered a pilot version of the program from September 2006 through January 2007 and a second one from January through May 2008. During the second year of the program, a significant new partner was added: the coordinated school health director for Murfreesboro City Schools, who assisted with the recruitment of participating families and the program's logistics.

The DHF program emphasized two primary goals for participating families: 1) improving eating habits and 2) increasing physical activity. Through a series of four special events, participating families set SMART goals (specific, measurable, attainable, realistic and timely) and learned a wide-range of activities, tips, recipes, facts and simple lifestyle changes to help them reach their goals.

Senior-level students who volunteered to serve as family health coaches received eight hours of training from Sheehan-Smith. The training program included topics such as the role of health coaches, their specific job responsibilities, goal setting, developing strategies to accomplish goals, communication and motivation techniques and how to record their family's progress. Students used scripts to guide their communication with family members and participated in follow-up training sessions after each special event. These sessions allowed time for reflection on their development as a coach and additional planning time for strategies to help their families be successful. Twenty to thirty families were recruited for each program; a \$25 registration fee per family was required to boost buy-in for the program. The recruitment flyer listed incentives such as free passes to a local gym and grocery store gift cards for successful program participants. The majority of participating families came from the DCMS membership base. During the second program, half of the families recruited by Murfreesboro City Schools were identified as low-income. Three Discovery Center staff and their families participated as well, along with Brinthaupt and his son. Families with children between the ages of five and fourteen were given first priority.

Each family met their family health coach during a special evening event held at the museum. During this first event, families learned about the program, received an educational notebook and worked with their coach to set their family's SMART goals. Families also received pedometers, which were used throughout the program to record and increase daily steps. Nurses recruited by Murfreesboro City Schools recorded the blood pressure, height and weight of each family member during the first event and at the last event. Parents

> who participated in the second program session completed a pre- and post-program blood lipids profile through a local pharmacy or their family physician. Finally, parents completed pre- and post-program measures of their family's eating, physical activity, food shopping, meal preparation, TV viewing and computer use habits.

> During the subsequent three events, families reviewed and revised their SMART goals with their family health coaches and participated in a wide range of hands-on activities. Families tried healthy snacks and meals, learned how to read labels and to substitute healthy ingredients in recipes, created a visual portion-control plate, participated in physical activities and discovered just how much sugar and salt are in various foods and meals. All activities were geared toward raising awareness about health issues and providing the skills and encouragement to help the entire family develop healthier habits.

> In between the special events at the museum, health coaches contacted families at least once a week to assess their progress, answer questions and provide encouragement. Some coaches met with their families at local grocery stores, parks and other facilities to provide more in-depth coaching. Because the coaches were students, they consulted with and reported to their professor, Dr. Sheehan-Smith, during the program.

Evaluating Program Success

Did the DHF program work? According to the post-program assessments, families reported that they were eating more fruits and vegetables, watching less TV, preparing more meals together, limiting soft drinks and other sources of added sugars, walking more and spending more time being physically active together as a family. All of these assessments were statistically significant improvements over the parents' pre-program re-



A boy learns if he has grown any taller since beginning the Discovering Healthy Families program.

...the museum needed partners, including dietitians, nurses and other health organizations. Changing behavior—especially healthrelated habits—involves so many psychological, social and attitudinal barriers that they needed to find people with expertise in these areas. sponses. Written comments from parents also reflected the program's success. For example, one father wrote that "the information and activities were most beneficial. [Our coach] went above and beyond." A mother from another family wrote, "We loved the pedometers! The recipes were great too. The encouragement made a big difference!" Another mother noted that the things she most liked about the DHF program were "general awareness of the small steps we can take to make a bigger difference and access to a personal coach who helped us evaluate our current needs." Nine families from the first year completed a one-year follow-up survey in which they noted that they and their children were still benefiting from the program: their families continued to be more physically active, they still used what they learned from the program and they would recommend the program to other families.

The duration of the programming allowed the museum to assess the actual impact with some certainty. For the DHF program, 95 percent of respondents either agreed or strongly agreed that their family's eating habits improved; 84 percent agreed or strongly agreed that their family's physical activity levels improved. All respondents agreed or strongly agreed that their family learned things that they will continue to use after the program ended. In addition, 53 percent of the adults showed weight loss, 60 percent showed improved systolic blood pressure, 40 percent showed improved diastolic blood pressure and 50 percent showed positive blood lipids change (based on the TCHDL ratio). These outcomes either met or exceeded program expectations, which were outlined in a detailed logic model created during the development process.

These results are very encouraging and indicate that the integration of family health coaches and fitness assessments, along with long-term goal setting, feedback and hands-on learning create a program that can result in true lifestyle changes.

Future of the DHF Program

In discussing the future of the program, the DHF development committee identified roadblocks to expansion. The key limitation for families has been the schedule of four events set around a single university academic semester that limits program implementation to once a year. It also poses a problem for the program's newest partner, the Murfreesboro City Schools. Their health director reports that once school starts, they assess the health of all students, one school per month. After identifying at-risk students at an elementary school in September, for example, they would want to enroll those families in the DHF program immediately and not ask them to wait until February. Most families had a difficult time attending all four DHF events due to family illnesses, schedule conflicts or vacations. As already noted, most families deal with major time constraints, some of which make participating in the DHF program more difficult.

To address these problems, the committee decided to make three key changes that also will allow the DHF program to create additional partnerships with local community groups and to reach more families each year. First, MTSU students will continue to serve as coaches during the spring semester, but the DHF program will only include a beginning orientation and an ending celebration event at the museum. Second, families will meet with their health coaches on a more flexible timeline for ten weeks at established community stations including grocery stores, city recreation centers, local gyms and the museum. These community stations will serve as the key sites for the second expansion of the program. Third, practicing health professionals will be recruited and trained to serve as community health coaches for a minimum of two years. These community health coaches will have the resources available to implement the DHF program at any time throughout the year.

REPLICATION TIPS

Many children's museums offer one-time fairs or traveling health exhibits, designed primarily for children, that can reach thousands of children and their families and can raise awareness about the need for exercise and healthy eating. However, single experiences are usually not enough to overcome the many barriers to permanently improve eating and fitness that families struggle with every day. Discovering Healthy Families provides a new approach to tackling this difficult issue by focusing on the entire family through an in-depth program that involves repeat participation and coaching support. Because many museums offer some form of health-related activities, the foundation for starting this type of program may already be in place.

PARTNER WITH A UNIVERSITY (IF POSSIBLE)

For Discovery Center, the process from idea to implementation worked very smoothly, but only because of pre-existing and strong relationship with Middle Tennessee State University. MTSU provided three key ingredients for this program: family health coaches, staff and coach training and program evaluation. Without their research expertise, evaluation of the program from an objective point of view would not have been possible. Many museums run programs they hope and think are effective, but few actually determine whether or not they actually are.

If the health coaches can be recruited from other sources (whether inside or outside your museum), then a partnership with a local university is not a necessity, but it definitely helps!

KEY INGREDIENTS

- 25–30 family health coaches
- 25-30 families
- 5–8 nurses
- museum staff and facilities

• \$20,000–\$30,000 (funds for equipment, health coach stipends, museum staff, mailings and registration, etc.)

• resource and goal-setting notebooks for families (available through DCMS)

- 100 pedometers
- activity supplies (too numerous to list; most are inexpensive)

PREPARATION

Set program dates.

Plan for a three-month program.

Finalize special events and stations. Here is a suggested schedule for a nine-week session:

Week #1: Orientation, assessment, pedometers and snacks

Weeks #2–8: Label Lingo, Art of Portion Sizes, Indoor Fun and Snacks, Active Art, Healthy Cooking, Sugar Shock and Physical Activity stations. These stations can be used either as special events or part of a more flexible schedule.

Week #9: Celebration and Assessment Event

ohl Children's Museum of Greater Chicago's Healthy Lifestyles and Fitness for All aims to counter the negative impacts of unhealthy eating habits and sedentary lifestyles and the subsequent rise in childhood obesity by including children, parents and educators in highquality early learning opportunities that promote healthy food choices and encourage outdoor activity. Launched in 2005, this program, sponsored by Kraft Foods, Inc., includes nutrition-based activities in the Dominick's Grocery Store exhibit, a health-focused field trip for pre-K through third-



Outside on a bright sunny day, children take part in the Healthy Lifestyle and Fitness for All program, jumping around in *Habitat Park*, the museum's two-acre outdoor exhibit.

Healthy Families and Fitness for All

Kohl Children's Museum of Greater Chicago Glenview, Illinois

Jennifer C. Oatess, Director of Development

grade school groups and opportunities for essential physical activity in the museum's two-acre outdoor *Habitat Park* exhibit.

The Museum and Its Environment

Situated on nearly nine acres of land, Kohl Children's Museum features seventeen interactive exhibits designed to address the developmental needs of children ages birth to eight. Within this vibrant indoor/outdoor setting, the museum offers enrichment activities to augment the key learnings of each exhibit environment. Designed, constructed and maintained as a Silver-level LEED (Leadership in Energy and Environmental Design) building as designated by the U.S. Green Building Council, the museum is a model for environmentally sound and sustainable building practices. Museum exhibits and programs have all been developed according to the principles of Universal Design, providing barrier-free accessibility to children with a wide range of abilities. Each year, more than 350,000 visitors

For Healthy Lifestyles and Fitness for All, the museum turned to local corporate partner Kraft Foods for advice on how to develop programming that would be based on best practices in nutrition and physical fitness education. Since 1993, Kraft has sponsored various efforts at the museum, but this new involvement represented the most substantial programmatic partnership to date. come to the museum to learn through its immersive exhibits and discovery-based programs, all developed using best practices and standards put forth by the Illinois State Board of Education and the National Association for the Education of Young Children. From arts literacy offerings in the *Art Adventures* and *Music Makers* exhibits to math literacy programming, the opportunities for broad-based early learning within the museum are many.

In addition to its onsite activities, the museum conducts several community outreach programs that serve nearly 10,000 children, families and educators each year. Its flagship outreach program, Early Childhood Connections, works directly in schools and childcare centers of need in the city of Chicago and nearby suburbs to improve the classroom environments for children who are considered at risk of academic failure. Professional development opportunities, support for teachers and critical parent involvement through classroom workshops and museum visits throughout the school year are at the core of the program. The museum also introduces area educators to anti-bias

curriculum through the Allstate Foundation Positive Play program, brings arts literacy programming to children at Chicago's Off the Street Club and delivers continuing education workshops to children who are in short- and long-term care at the University of Chicago's Comer Children's Hospital.

Program Development

Healthy Lifestyles and Fitness for All represents a proactive collaborative partnership among the children's museum, area public schools and a local corporate partner. It capitalizes on the museum's unique indoor and outdoor learning environments while addressing a critical need for quality programs that encourage healthy eating habits and physical fitness.

For Healthy Lifestyles and Fitness for All, the museum turned to local corporate partner Kraft Foods for advice on how to develop programming that would be based on best practices in nutrition and physical fitness education. Since 1993, Kraft has sponsored various efforts at the museum, but this new involvement represented the most substantial programmatic partnership to date. At the time, the museum's program aligned well with Kraft's health and nutrition initiatives.

Using Kraft's "Steps to Healthy Living" as a starting point, the program then adapted that philosophy to meet the museum's core mission of "[creating] exemplary, developmentally appropriate, hands-on educational opportunities for young children in a fun, intimate environment." With a shared commitment to positive lifestyle changes that are not extreme but sensible and can be enacted over time to ensure sustainability, the resulting program combines the museum's expertise in early learning, Kraft Foods' research in healthy lifestyles and the partner schools' experience in addressing the needs of schoolaged children and their families. In this way, Healthy Lifestyles and Fitness for All provides constructive and innovative solutions to the growing concern over childhood obesity in the United States.

Prior to the development and implementation of the program, the museum offered only the most basic nutrition information to its visitors. Food choices in the Dominick's Grocery Store, for example, were generally healthy in nature, but there were no companion activities or resources to guide children in a more informed exploration of foods in the exhibit. To improve existing efforts, experts from Kraft suggested that the museum research the newest USDA food pyramid and integrate its key messages into the exhibit with prominent and permanent signage to serve as a content resource for visitors. To augment the signage, the museum developed shopping list cards with colorful and appealing graphics and clear, simple text to assist young visitors in selecting healthy foods in the exhibit. These lists allow both non-readers and early readers to participate. Food categories are color-coded and include simple illustrations to match the foods that are offered in the exhibit, including fruits and vegetables, breads and dairy products. Additionally, a brochure rack in the exhibit provides adult-level, take-home information that has been researched and developed for Kraft's "Steps to Healthy Living" program. Finally, experts from Kraft evaluated the food products in the exhibit and replaced them with new products available through the Kraft's Sensible Solutions line, which features lower-calorie processed foods that, when consumed in moderation, can contribute to positive changes in eating habits. Dominick's Finer Foods, the main sponsor of the Dominick's Grocery Store, followed suit and replaced many of its products in the exhibit with organic offerings from its "O Organics" product line.

Support from Kraft was further used to develop the Health and Nutrition field trip, offered for children in pre-K through third grade.

While visiting the museum, children were encouraged to think about their food choices and to get up and move around, engaging in simple but essential physical activities. Field trip content was designed with expert support from Kraft and in partnership with Whittier Kindergarten Center, located in Waukegan, Illinois. Sixty-six percent of the children at Whittier have limited English proficiency; 33 percent of Whittier students are considered low-income (Illinois State Report Cards, 2007). In 2007, nearly 200 Whittier students participated during the critical development and pilot phase of the Health and Nutrition workshop. They were introduced to basic nutrition concepts based on accepted nationwide standards and nomenclature such as "anytime foods" (e.g. fruits and vegetables") and "sometimes foods" (e.g. cakes and cookies). The program supplemented the existing physical fitness lessons already learned in schools with highenergy activities at the museum. Like all museum workshops, this field trip includes supplementary

materials and recommended take-home activities and is aligned with Illinois State Learning Standards put forth by the Illinois State Board of Education. After this pilot version of the program was enthusiastically received, the museum added the Health and Nutrition field trip to its roster of permanent school group offerings.

But the museum's commitment to children and families at risk did not end with the development of the field trip and its companion materials. Because many participating families face multiple barriers that prohibit access to museum programs, including the cost of admission and limited English proficiency, the museum provided complimentary family passes and offered classes and materials in both English and Spanish using bilingual museum educators. More than 60 percent of participating families returned to the museum through this program. They participated in additional family celebrations in which concepts covered in the program were reinforced, and children were provided the opportunity to share their knowledge with their parents and adult caregivers. Funds from Kraft were earmarked to cover the costs of the family passes and family celebrations, as well as transportation to and from the museum. Dominick's Finer Foods provided healthy snacks for these events.

The Museum's Outdoor Learning Environment

Good food choices and basic physical fitness education are among the first steps in adopting a healthy lifestyle. With this in mind, an essential factor in early planning and design for the museum's facility



A little girl looks for healthy foods, using shopping list cards, while shopping in *Dominick's Grocery Store*.

To augment the signage, the museum developed shopping list cards with colorful and appealing graphics and clear, simple text to assist young visitors in selecting healthy food choices while in the exhibit. These lists allow both non-readers and early readers to participate. Food categories are color-coded and include simple illustrations to match the foods that are offered in the exhibit, including fruits and vegetables, breads and dairy products. Additionally, a brochure rack in the exhibit provides adult-level, take-home information that has been researched and developed for Kraft's "Steps to Healthy Living" program. was the commitment to providing substantial outdoor space where children could discover and connect with nature through critical outdoor play. Using its spacious, park-like setting, the museum directly addressed the growing concern among many early childhood experts about the decrease in outdoor environments and opportunities for young children and the corollary increase of passive indoor activities that are associated with physical, social and emotional problems. The resulting outdoor learning environment, Habitat Park, features a safe and contained space that allows children to freely explore the exhibit's various habitats of woods, prairies and gardens. Connected to the indoor exhibit, Nature Explorers, which introduces children to small animals and insects, Habitat Park provides children with a safe entry and easy transition to the outdoors, where vibrant-and real-plant life and unlimited experiences with natural elements provide an engaging and stimulating environment for outdoor play.

Whether rolling down (or up!) a hill, climbing on interactive sculptures made of natural materials such as limestone or river rocks, or running through a prairie grass maze, the exhibit's flexible learning space provides the simplest outdoor experiences that are then supplemented with facilitated activities such as Bubble Play and Parachute Play that encourage children to work and play together.

Complementary Strategies

Free-choice learning, where children direct their own activities, as well as guided activities such as workshops, are overseen and facilitated by museum staff who have received concentrated, in-depth training. Exhibit guide training, a critical component within this and all museum programs, equips museum staff with developmentally appropriate strategies to engage children in positive dialogues about the key learnings of the program and to model these fruitful interactions for parents and other adult caregivers.

The museum extends its commitment to healthy lifestyles in various other ways, from healthy food choices in its vending machines and its café to its cause-related fundraising events including the annual Turkey Trot. Hosted by the museum's Women's Board, Turkey Trot allows area children to raise money by completing laps around *Habitat Park*.

It also features healthy snacks, again provided by Dominick's Finer Foods. Museum staff members are encouraged to join the local Glenview fitness center at a reduced rate for employees, and many staff members take advantage of nearby parks on their lunch hours for walks to de-stress through physical activity.

Program Evaluation

To measure the effectiveness of the Healthy Lifestyles and Fitness for All program, the museum evaluates each component using formal and informal assessment methods including Likert scales, parent surveys and informal observations. The results of these evaluations are compiled and reviewed on monthly, quarterly and yearly bases, with the goal to ensure that the program continues to have a measurable impact on participants and that any adjustments or adaptations to the program are made when called for. For the last three years, results of these evaluations have consistently demonstrated that this program has made both practically significant and statistically significant positive changes in participants.



During a field trip visit, kids play outside in the museum's Habitat Park and are guided through physical activities that supplement their school's physical education curriculum.

Using its spacious, park-like setting, the museum directly addressed the growing concern among many early childhood experts about the decrease in outdoor environments for young children and the corollary increase of passive indoor activities that are associated with physical, social and emotional problems.

REPLICATION TIPS

Many components of this program can be replicated by a museum of any size or budget, even ones without substantial outdoor space. The support of a local or national food services company like Kraft helps a lot, but that isn't a prerequisite. Here are a few ways any children's museum can take basic steps to demonstrate its commitment to healthy living.

EXHIBITS

Do you already have a grocery store exhibit? If so, create your own shopping lists and include information about the USDA food pyramid that you can adapt from the USDA Web site (www. mypyramid.gov). The site includes information for preschoolers through older children. Laminate the materials so that they last, and be sure to audit the loose items in the exhibit so that you have enough healthy options for your visitors to choose from.

Any museum, with or without outdoor exhibit space, can offer activities that encourage just plain moving around. You don't need to have an outdoor exhibit to add the benefits of outdoor play. If you want to add an outdoor component and have no outdoor space, partner with area park districts to bring quality programming to your audience.

PUBLIC PROGRAMS

Develop companion programming to reinforce your message. Partner with area schools to test out your programs, and be sure to include information to extend the programming into the classroom and at home. Don't forget about parents! Include tips in your materials that are aimed directly at them and will help them to discuss healthy choices in the home. Education can empower children to develop healthy relationships with food.

EMPLOYEE WELLNESS

It's important to extend the learning experience beyond the museum floor, so we incorporated healthy lifestyle principles into our everyday activities. We made healthy foods available in our vending machines and at our events. In line with food options offered in our exhibits, we don't recommend eliminating snack foods entirely in real life either. Even snacks are fine—in moderation. Work with area park districts and community centers to start an employee wellness program and encourage your staff to spend time outside.

Outreach programs Museum programs that sprout health and wellness messages out in the community

Little Sprouts Kids' Garden at the Farm

Cape Cod Children's Museum Mashpee, Massachusetts

Lori Lieberman, Director of Arts & Agriculture

ape Cod's heritage centered on the fishing and whaling industries, but agriculture also played a major role in its history. Farmers on the Cape raised cattle and sheep and grew produce on its rich farmland to supply urban areas such as Boston. Today, little agricultural land remains on Cape Cod and there are few working farms, but growing awareness of organic and local food production has led to renewed interest in the Cape's agricultural heritage.

Many children today are disconnected from the source of their food, unaware that it is possible and desirable to grow their own food rather than purchasing it from a supermarket. Children do not necessarily have relatives or neighbors able to share their knowledge or expertise as in past generations, when growing a garden and raising farm animals at home was common practice.

But what if a flock of free-range chickens encountered on the way to pick cucumbers are the same chickens that children incubated and raised from farm-gathered fresh eggs the previous summer? What if, after a lesson about pollination, children watch the beekeeper after he arrives unannounced to check on his hives, wearing his netted hat and gear? What if the shortcut from the tomato fields takes children on a path through an enormous field of ripe blueberry bushes? What if the wool that children are washing, carding and spinning was sheared from the sheep in a nearby pen? And what if the beautiful golden natural dye that those children are using was made from marigolds gathered from their very own garden?

Since the summer of 2005, the Cape Cod Children's Museum (CCCM), in partnership with a local working farm, has offered a successful healthy practice called Little Sprouts. This hands-on program, held on the farm premises, focuses on gardening and farm activities with major emphasis on the garden that the children design, plant, maintain and harvest themselves. Children learn about organic gardening methods, good nutrition, the value of local

Many children today are disconnected from the source of their food, unaware that it is possible and desirable to grow their own food rather than purchasing it from a supermarket. Children do not necessarily have relatives or neighbors able to share their knowledge or expertise as in past generations, when growing a garden and raising farm animals at home was common practice. sustainable agriculture and the beauty of connecting to the seasons and the rhythms of the natural world. Classes include farm- and garden-related arts and crafts, science projects, stories, games and special activities.

Participating children grow and harvest a wide assortment of organic vegetables, berries, fruits and herbs that they share with their families throughout the growing season. During class, children spend the majority of the time outdoors regardless of the weather, working in the garden or engaged in activities elsewhere on the farm. Class time includes nature walks on the premises, visits with the farm animals and excursions to the farm fields for picking and learning about the wide variety of available



Little Sprouts participants proudly display the fruits of their labors.

fresh produce. Rather than watching the natural world on a television or computer screen, Little Sprouts participants are directly immersed in it during every class, whether planting seeds, observing a bee hive, discovering insects in the garden, feeding the chickens or measuring rainfall.

The Institution and Its Partner Organization

The Cape Cod Children's Museum provides a learning environment that stimulates curiosity, creativity and imagination and inspires children and their families to engage with each other, their community and the world at large. The museum opened in 1992 and is currently located in the town of Mashpee. As the only children's museum on Cape Cod, it serves families of young children Capewide throughout the year while also attracting seasonal visitors in the area. The museum offers ongoing classes and programs in art, science and drama to a multi-generational audience, with a focus on children in the toddler years through age ten. Healthy practices are central to the philosophy of the museum, encouraging families to play and explore together while offering programs and resources to support healthy choices. CCCM regularly presents parent-toddler classes that emphasize positive interaction and child development; family exercise, dance and yoga classes; children's cooking classes; Red Cross babysitting courses; and many special events that emphasize healthy family life.

The museum's Little Sprouts partner organization, Coonamessett Farm, is a farm and research enterprise located in nearby East Falmouth. Founded in 1989, the farm is comprised of twenty acres of fields and greenhouses offering a variety of vegetables, herbs, berries and flowers. Farm animals include goats, sheep, donkeys, alpacas, chickens, ducks and rabbits.

Farm membership or day passes allow patrons to pick their own produce. The premises also include beehives, a café and farm stand and a wind turbine. Research endeavors focus on organic methods, hydroponics and aquaculture, wind energy, native plants and sustainable agriculture. The farm offers a community-supported agriculture program and is home to a Montessori middle school. More than 5,000 school children visit the farm each year to participate in educational programs.

The Growth of Little Sprouts

The kids' gardening program originated as a completely private enterprise, not associated with Coonamessett Farm or the Cape Cod Children's Museum, in the summer of 2004. It was designed simply to engage young children in the joy of organic gardening. Classes were geared for children ages three to six years, and garden space was rented on private land. The Cape Cod Children's Museum took over the program, renamed it Little Sprouts and entered into partnership with Coonamessett Farm in the summer of 2005. That first summer session was a trial run to determine whether the anticipated need and desire for a children's gardening program was real. Thirty-six preschool-age children participated, maintaining a garden throughout the summer from seed to harvest and following the original strictly garden-focused curriculum. Because the growing season on Cape Cod extends through October, the decision was made to add a fall session. At the same time, the program was expanded from only gardening to include farm activities such as animal care and natural fiber arts.

Since that first successful summer and fall, the Little Sprouts program has evolved and refined its curriculum each year while expanding its audience. Currently, the program runs for ten weeks during the months of June, July and August, meeting at the farm once a week for one and a half hours. Six age-appropriate classes are offered, serving approximately sixty children ages four through ten. The fall session is held for six weeks during September and October, serving approximately thirty children. During the fall session, a Sunday afternoon class is available for children ages five through ten. In addition, a Sunday morning parent-child class option is offered for children ages three through five, with an accompanying adult in

attendance. Many children choose to attend both the summer and fall sessions, which allows them to fully experience the entire growing season and nearly a half year of the farm's life and work cycle.

Approximately two-thirds of the children attending Little Sprouts live year-round on Cape Cod in Falmouth, Mashpee and other nearby towns. The remaining one-third are summer residents, with permanent residences elsewhere in Massachusetts, in other states and even in other countries. Approximately half of the participating children have attended Little Sprouts for more than one year, and a large percentage of attending families have more than one child enrolled.

Measuring Impact

Little Sprouts has proven to be a successful and desirable program for both the Cape Cod Children's Museum and Coonamessett Farm. This success has been measured through written evaluations (requested from participating families at the end of each session), repeat attendance and the addition of younger siblings and fully enrolled sessions with a waiting list. Many participating families have reported positive lifestyle changes in terms of nutrition and meal planning, and several have built gardens at home, putting into practice all that the children have learned at Little Sprouts. Almost all of the enrolled families have become members of Coonamessett Farm and regularly visit to enjoy outdoor family time together while exploring the premises, visiting the farm animals, harvesting fresh farm produce or gathering eggs from the chickens and ducks.

Because the children are immersed in farm life during their participation in Little Sprouts, they acquire a unique appreciation for all aspects of the farm's seasonal cycle. The farm and garden work done during classes—in sunshine and in rain—parallels the ongoing efforts of the farm workers. The Little Sprouts garden reflects the seasonal development of the surrounding farm fields from start to finish, from empty garden rows in the spring right through to sowing a cover crop of rye grass to prepare for the winter. The children observe natural processes such as the birth and growth of farm animals, the sprouting-fruiting-cyclical completion of plants and unanticipated but natural problems such as insect damage and plant disease—all part of agricultural life past and present.

Building community is an essential aspect of Little Sprouts. Children do not have their own individual garden plots to care for but instead work together to create a beautiful and productive experience to share with each other and their families. Community spirit is also an important part of the program's end of summer harvest celebration, when the children gather produce from the Little Sprouts garden not for themselves but for the local food pantry.



A favorite activity...watering the garden.

Little Sprouts...children grow and harvest a wide assortment of organic vegetables, berries, fruits and herbs that they share with their families throughout the growing season. During each class, children spend the majority of the time outdoors regardless of the weather, working in the garden or engaged in activities elsewhere on the farm. Class time includes nature walks on the premises, visits with the farm animals and excursions to the farm fields for picking and learning about the wide variety of available fresh produce.

REPLICATION TIPS

A program modeled on Little Sprouts could be replicated or adapted at a museum of any size. Gardens, whether in-ground or raised bed, could be built and maintained on the premises. Techniques such as organic gardening methods and composting could be taught to the children. Gardenrelated science experiments and arts and crafts could be offered, and support information including recipes and other handouts could be made available to families. Knowledgeable members of the community-master gardeners, beekeepers, farmers, artisans and craftspeople-could add their hands-on experience and expertise to the curriculum, or field trips for the children could be arranged. Most desirable would be the opportunity to establish a working partnership with a local farm, nursery or community garden, such as the one with Coonamessett Farm.

DEFINING THE PARTNERSHIP

The Little Sprouts partnership is a shared enterprise. The Cape Cod Children's Museum is responsible for providing staff, marketing and publicity, art and science supplies and bookkeeping/accounting. Coonamessett Farm provides garden space, water, plants and seeds, access to the farm facilities and shared expertise. Families participating in the program pay a fee that covers registration and tuition and includes all art, science and garden supplies, garden tools, weekly harvested produce and an end-of-summer harvest party. Expenses include staff salaries, materials, supplies and insurance fees. After expenses are deducted from the total program fees, any profit is split between the museum and the farm.

OUTLINING THE PROGRAM

Classes are held at Coonamessett Farm, with exclusive use of its educational center during class time (including tables, chairs and a sink). The children have an entire farm row, approximately four feet by seventy-five feet, for their class garden.

Families are given complete instructions regarding clothing recommendations, drop-off and pick-up expectations, bathroom availability and any other essential information before the program begins. A comprehensive emergency contact form, including details of any allergies or other concerns, is collected from each participant along with a release form that covers permissions to allow emergency medical care, to dismiss a child to persons other than a parent and to use photographs or video of a child for publicity, press coverage or crafts.

TOOLS AND SUPPLIES

Garden tools are supplied for each class (ten each of trowels, garden forks, child-size rakes and hoes, watering cans, small weeding buckets and kneeling pads, plus two each of the above in adult sizes for teachers). Actual sturdy working tools are recommended, not toys or plastic—real work deserves real tools. Each child is encouraged to bring his or her own pair of garden gloves and a basket or bucket for harvesting. Additional garden supplies and materials (trellis, compost, fertilizer, wheelbarrow seeds and plants, etc.) are provided as necessary, as are all art and science materials required. The children are each given a personal farm and garden journal (a bound blank book) to work on, adding their own unique thoughts and artwork over the course of the summer. These journals (with photographs from the session inserted by the teacher as a surprise) become treasured keepsakes of the children's Little Sprouts experience.

CLASS COMPOSITION AND SCHEDULE

Three Little Sprouts classes are offered on each of two days (six classes total), limited to ten children each and with age-appropriate peer groups. A variety of class times is available, some in the morning and some in the afternoon, avoiding the hottest portion of the day. Classes meet weekly for one and a half hours—enough time to accomplish program goals without exhausting the children. Meeting once a week fosters a sense of magic and anticipation, as many changes occur in the garden over the course of the week; meeting more often would transform spirited and fun garden work into garden chores and boredom!

Peer groups should be established based on a good mix of girls and boys, with age range a consideration (though classes comprised of sibling pairs or groups can be successful). Classes of four- and five-year-olds, five-to-seven-year-olds and seven-to-ten-year-olds work well. Experience has proven that children younger than four or four-year-olds with little or no exposure to school or social settings tend to lack both the attention span and the physical and emotional stamina to truly benefit from a program such as Little Sprouts. To address this issue, Little Sprouts has offered classes during the fall session for children ages three to five years to attend with a parent or grandparent. Young children benefit from the assistance an accompanying adult can provide, and then are more prepared to attend Little Sprouts on their own the following summer.

CLASS CONTENT

Little Sprouts classes focus on a different farm or garden theme each week (for example, seed development and plant parts, composting, beneficial insects, weather, natural fibers, farm animals, etc.). A typical class will begin with a discussion of the theme, including supporting activities (games, hands-on experience, visual aids). There is always a related arts and crafts project, either individual (vegetable prints, painted birdhouses, bug houses, etc.) or group (creating scarecrows, building fairy houses, painting large pots for herbs). Depending on the daily theme, there may be a science project (building a worm farm, hatching butterflies, soil testing, using magnifying glasses to examine insects, incubating an egg). Each class includes work in the garden-planting, weeding, watering, fertilizing and harvesting-with frequent breaks for cool water (supplied at each class). Classes finish with a walk on the farm to feed the chickens, visit the farm animals and explore what's happening in the fields and greenhouses. The children bring their harvest baskets with them on these walks to gather new and different vegetables, herbs and berries to taste and share with their families: turnips, beets, chard, raspberries, cabbage, cilantro-whatever is in season. All of the children promise to try and taste everything that they carry home in their baskets! This encourages them and their families to try new foods and strengthens awareness of locally grown food. All produce harvested from the Little Sprouts garden is always shared among the children. At dismissal, the children gather their filled harvest baskets and any art or science projects. Handouts (recipes, articles of interest, further experiments or craft ideas) are distributed to parents, encouraging continued learning and family support. Weekly follow-up emails to parents ensure good communication about the previous week's class, upcoming class plans, farm events and other essential or interesting information.

What if joyful children skip down the hill toward their teacher each week, baskets in hand, calling "What are we picking today? Can we water the garden? Has the baby donkey been born yet?" Little Sprouts children do, and the program has been successful primarily because of the unique opportunity for the museum to partner with a real working farm within the community. Coonamessett Farm shares many of the same goals for healthy practices, encouraging families to experience nature on the farm and to eat healthy locally grown foods. The Cape Cod Children's Museum is able to offer a wonderfully exciting, creative and special opportunity for children through its Little Sprouts program. The museum team encourages other museums to seek out and establish similar partnerships in their own communities.

Mission: Active Future

Eureka! The National Children's Museum Halifax, United Kingdom

Rebecca Johnson, Play and Learning Director

ission: Active Future (M:AF), a project that promotes physical activity and healthy lifestyles, is based on a touring exhibition unit developed by Eureka! The National Children's Museum. It is funded by England's national government's sports funding body, Sport England's Active England program, and by a number of charitable and corporate partners. The project is based at Eureka! in Halifax, West Yorkshire, but is completely mobile. The exhibition has visited more than thirty-six venues since its tour began in May 2006 and has reached more than 15,000 children and adults.

Housed inside a giant semitrailer, *Mission: Active Future* offers a unique interactive experience especially designed for children ages six to eleven. The exhibit features sixteen activity-based challenges—educational, multimedia exhibits promoting the importance of good health and regular exercise. It was designed to enable the museum to visit some of the most disadvantaged communities in Yorkshire and the Humber region. Exhibit themes, relevant to children's daily lives, help them explore how their bodies work and how what they eat and what exercise they do can help them "get fit for the future."

M:AF doesn't start with the message "exercise is good for you." It begins by creating a humorous vision of a bleak future and then sets a challenge that it's not too late to stop it. The exhibit takes children to Spaceship Earth in the year 2105 where the whole population has become so inactive and lazy the parks are overgrown, footballers are hopelessly out of breath and the children have grown oversized thumbs from playing too many computer games! Introduced by child champions from the future, "the Active8," children are invited on a global mission in the revolution against inactivity. To succeed, the children must learn how to energize themselves, helping each other to reenergize the world.

Eight active exhibits, including Power Legs, Speed Bike and the Balance Board, engage children in physical activity to highlight the key physical elements of speed, power, balance, stamina and precision. These are alternated with eight passive exhibits, such as Health Busters, the Feel Good Factor and Heart to Heart, which encourage children to discover more about leading a healthier lifestyle. A log book is used to encourage children to increase their participation in physical activity over several weeks. When they complete six, twelve and twenty-four weeks worth of activity they can send their books to Eureka! and they will be rewarded with bronze, silver and gold level certificates. An activity wall chart is provided for children to discover how much activity their whole family engages in. Finally, the Web site, www.activefuture.org.uk, invites kids to visit for further ideas, play games and to exchange notes with friends and other active future health champions.

M:AF is managed by two full-time Eureka! staff members: a project coordinator and a session coach. Eureka! core staff support the administration and technical aspects of the project. This project was well funded and very elaborate; however, the replication section at the end of this article will consider how museums can approach similar outreach with fewer resources.



Housed inside a trailer that travels among populations with little access to museums, the futuristic *Mission:Active Future* exhibits challenge young visitors to lead active, healthier lives.

The Museum and Its Environment

Eureka! The National Children's Museum, the only major children's museum in the United Kingdom, is located in a small town in the north of England. It opened in 1992 and receives around 245,000 visitors each year, approximately 50 percent of which come from the local region, Yorkshire and Humber. The museum aims to engage children ages zero to eleven years in a range of play-based learning experiences that facilitate their emotional, intellectual, physical, social and creative development. Eurekal's 48,000-squarefoot building houses six large hands-on educational galleries. In addition, the museum does a lot of outreach work particularly with disadvantaged communities.

Mission: Active Future was not Eureka!'s first health-focused exhibit. *Me and My Body*, the largest gallery in the museum, is designed to increase understanding of bodies, how they work and how we stay healthy. In addition, there are healthy eating messages in the grocery store gallery and in the café.

Responding to Health Needs

As part of Eurekal's ongoing program of new issue-based galleries, *M:AF* emerged as a response to concerns over public health in the U.K., especially the increase in sedentary lifestyles, childhood obesity and subsequent health problems in later life. Around the same time, Sport England wanted to fund innovative projects to promote their key messages to children. By building on existing relationships with Sport England, *Mission: Active Future* was born.

Alternative methods of getting children inspired about physical activity were vital if disturbing public health trends were to be reversed. Putting an exhibit on a trailer provides an efficient way to access new audiences that would not necessarily be able to visit Eureka! With many issues relating to inactive lifestyles and health problems more prevalent in deprived communities, the project would be able to target specific neighborhoods far more effectively than a conventional exhibit tour. The design features of this project have turned physical activity on its head: Kids

Mission: Active Future doesn't start with the message "exercise is good for you." It begins by creating a humorous vision of a bleak future and then sets a challenge that it's not too late to stop it. can't wait to get on board the trailer.

The Development Process

Eureka! was asked to submit an innovative project proposal to meet the goals of Sport England, a nondepartmental public body and National Lottery distributor committed to creating a world-leading community sports development system and increasing participation in sport. Sport England's annual budget is £250 million (roughly \$343 million). Its mission is to increase participation in sports and active recreation by 1 percent every year through 2020. In 2002, the government published its Game Plan for sport, which outlined two major objectives for organizations across the U.K.: 1) a major increase in participation in sport and physical activity and 2) an improvement

in international success. Sport England's National Agenda, based on the Game Plan, was initiated in 2004.

Following Sport England's announcement of its funding for the *M*: AF project (£675,000, equal to about \$927,000) Eureka! embarked on a program to raise awareness through conference presentations, Web sites and print media. News of the innovative nature of the project spread quickly with many potential partners coming forward early in the development phase. Eureka! was fortunate to have a significant primary funder, which made it easier to attract match funders, including the Yorkshire and Humber Public Health Team, the University of Sheffield's Sports Engi-



Flex, left, and Jet, right, are two of the popular Action8 characters. Eureka! staff believe that the theatrical aspects and the relationships built with the characters have helped to connect children to the exhibit's messages. Consistent with Eurekal's overall museum philosophy, the exhibit uses an approach that identifies with and is respectful of children's everyday lives and is defined by a design aesthetic that is both professional in appearance and appropriate for the target audience.

A designer came up with three different styles for the characters, and Ideas United children were asked to decide which ones suited the concept design best. There was almost universal approval of the characters that most closely approximated the "manga" illustrative style of contemporary Japanese comics.

neering and Research Team, University of Sheffield and the Yorkshire office of the Youth Sport Trust, an organization dedicated to enhancing the quality of physical education and sports opportunities for children. Coming together to plan activities to complement the exhibition, local partners also were able to make use of the project to raise the profiles of their own programs.

The partners were vital at all stages of the project. Having a cross-section of experts from universities to contribute to the process ensured the content would be relevant and in line with current research. Eurekal's head of learning, Liz Smallman, developed the educational content. The key was to make sure that the choices offered were things that children can achieve, bearing in mind that they do not always have control over all aspects of their lives. The story and the Active8 characters support the truck's hands-on elements, as well as the pre- and post-visit activities.

concept was predominately male. Although this did not put them off, it was a strong point to consider in further design development. So the metallic design of the original concept shifted to a more colorful and softer concept, which received a much more positive response from both genders.

Once the design "feel" was correct we moved on to the story's characters. A designer came up with three different styles for the characters, and Ideas United children were asked to decide which ones suited the concept design best. There was almost universal approval of the characters that most closely approximated the "manga" illustrative style of contemporary Japanese comics.

Eureka! made some changes to the project once the schools were involved, including reviewing the number of children participating at any one time and the number of sessions that could be done in a day. Even though children experienced the exhibit as a visit from the future, the sessions were led by twenty-first century humans,

Ideas United, a consultation group made up of children, offered ideas in an open and inclusive forum and took part in tasks, brainstorming and debates. These children brought refreshing and honest views with them, and Smallman believes that this partnership ensured the project was up to date and that the characters were genuinely appealing to the intended audience. Ideas United helped the project team develop the concept and then provided feedback to the concept design of the exhibits and the characters. Responding to the story behind *M:AF*, where children came back from the future to make sure this generation of children becomes more active so that future generations are healthy, examples of feedback included the following:

• "Really like the thumbs getting bigger." (This was the most popular part!)

• "It's exciting, I want to know what happens!"

• "I like the idea that we are going to help and go on a mission."

• "But how do you know what it will be like in the future?"

Members of the group were then shown the concept design sheets, which initially looked like scenes from the "X-Files," and were asked to stick post-it notes on them with adjectives or other words that described their initial response to the designs. Responses were separated by gender. Although the comments were positive and, when questioned, the descriptors "weird" and "dark" were perceived as advantageous qualities, there was a skew of thought from the girls that the who could not work without an occasional rest.

The Outcomes: Institution, Audience, Community, Staff

M:AF's initial target audience was 10,000 children by June 2007, with approximately 40 percent of them from communities that rank high in the National Indices of Deprivation or that exhibit particularly stark health inequalities. The project aimed to visit at least thirty-five different venues across the Yorkshire and Humber region



Mission: Active Future travels to numerous locations in a semitrailer full of "active" and "passive" exhibits.

The key to M:AF's success is its innovative approach and its humorous, offbeat message style.

by June 2007. These targets were met and exceeded: by June 2007 more than 13,500 children experienced *M:AF.*

Eureka! evaluated the project in a number of ways. A formal evaluation was managed by an external company. Informal evaluation was done through comments on the Web site; more than 11,000 completed questionnaires from children and teachers, staff comments, log book returns and booking data also added to the process. *M:AF* had reached new audiences, a fact determined by zip code data. Key performance indicators demonstrated *M:AF's* impact and success in terms of attracting audiences.

While evaluation results prove that a project like this can have an impact, *M:AF* is fun, as evidenced by the expressions on the faces of both children and adults at the launch. This spirit grew, and the arrival of the *Mission: Active Future* truck at a new site was likened to that of a real UFO landing! Lasting positive relationships have come out of the project, both with project partners and the children involved. Eureka! still receives feedback from children who attended a session, either through the Web site or by late returns of their logbooks. Even children who have not attended appear to be aware of the project; one child told his mother that "Eureka! has a trailer you can go in that makes you as fit as a superhero when you come out!"

Mission: Active Future had a positive impact on the organization and the staff team as well. Jamie Eagleton, *M:AF* coach, recalls his experiences on the road, "It was amazing, every time you pulled into a school the children's faces lit up, I felt proud to be 'the face' of *Mission: Active Future.*" He believes, too, that being involved in the project helped him become a confident "outreach enabler." The success of the project inspired Eureka! to develop more outreach programs for schools. Through Eagleton's genuine enthusiasm for the project he encouraged colleagues to get involved, not only with *M:AF*, but in the other outreach programs.

REPLICATION TIPS

DECIDE YOUR AIMS...

...then spend some time seeing who else may be working towards the same aims—funding applications carry more weight if partnerships are already being built. You may find a major funding body or organization looking for an innovative project akin to your aims. Once funding is in place, agree on clear, measurable goals to deliver each funder's requirements.

IDENTIFY YOUR AUDIENCES

Consider your community. Spend time with your target audience—what is going to hook them? Eureka! found that cutting edge cartoon figures were just what was needed. Maybe your museum can capitalize on a certain music style or aspect of youth culture.

BUILD PARTNERSHIPS

Who can help you in the community? Seek out people who promote healthy lifestyles from various angles. Talk to schools and community groups—get them interested from the start to help drive

the process. Right from the beginning the integral partnerships with Eureka!'s local community aided the project's success and allowed the excitement and anticipation to build. It is also important that both the audience and the partners believe that the project truly benefits each of them.

LISTEN TO YOUR AUDIENCES

Build strategic partnerships to inform the development process. Ensure that the consultation is ongoing to make certain that you are really meeting the audiences' aims. Eureka! recommends the following groups:

• **Children's voices:** set up a group of children from local schools to assist in the creative side of the development and to serve as expert critics at each stage of the process.

• **Strategic alliances:** seek advice from the business community, local government, education authorities, museums, libraries and healthcare groups.

• Academic excellence: bring in academic experts and peers from relevant fields to make sure your content reflects leading edge research.

• Artistic collaboration: involve artists to add dynamism to the design and development process.

BE INNOVATIVE AND EXCITING

As previously stated, this project was well funded and very elaborate, but there are ways you could replicate it with fewer, less expensive resources. The key to *M:AF's* success is its innovative approach and its humorous, offbeat message style.

The story and the characters were also key, as was the presence of an inspirational, enthusiastic person leading each session. To keep the fun element, games were created and used to get kids moving. "Activ8 Cards," featuring one of the characters on each, suggest activities that demonstrate how fun, active games can be created using basic resources or simply your imagination. Exhibit visits are fast-moving and designed to keep children active throughout the hour.

Building a Better (and Healthier) Me

Staten Island Children's Museum Staten Island, New York

Addy Manipella, Director of Education Marjorie Waxman, Director of External Affairs

ho knew that "downwards facing dog" would get a thumbs up from kids? This positive response to yoga from a group of inner-city elementary school students is just one of the lessons learned—by educators and students—as part of the Building a Better Me (BBM) project, a response by the Staten Island Children's Museum to disturbing trends in childhood health. BBM motivates children to exercise their minds, bodies and imaginations.

The Museum and Its Environment

Since opening in 1976, the Staten Island Children's Museum has focused on its principal role as a resource to families and schools in the community. Eight hands-on interactive exhibitions exemplify the museum's practice of giving children first-hand, authentic experiences that aid them in their quest to understand the world around them. While not specifically concerned with health, one of the earliest museum exhibits, *Everybody*, featured a close look at the physiology of a giant twenty-five-foot-long child. Kidz Cook, a forum for healthy eating information, is one of the museum's most popular drop-in programs.

Every year, more than a thousand classes visit the museum for carefully planned exhibit-based programs or art immersions centered around masks or bookmaking. In 2008, more than 15,000 children were served by museum programs, most through multi-week residencies in their classrooms. Family visits to the museum also revolve around the exhibits, with opportunities to participate in programs that run the gamut from cooking classes to a bilingual playgroup for toddlers to daily storytelling to animal feeding programs and seasonal festivals.

Although a majority of the borough is middle class, the museum is located on the north shore of Staten Island, home to large numbers

Building a Better Me provides low-moderate income (LMI) children with a non-judgmental framework within which they can express themselves, learn how choices may affect their health and empower themselves to make positive decisions about their lifestyle. Children get the message that they can influence their health for a lifetime by making changes now that are enjoyable and enrich their lives.

66 Healthy Kids Healthy Museums aten Island, home to large numbers of low-income families, minorities, immigrants and senior citizens. There is a desperate need in this community for constructive outof-school activities for children.

Responding to Health Needs

One fact alone is motivation enough for taking proactive measures: Since 1997, Staten Island has had the highest death rate of the New York City boroughs due to heart disease, lung disease and cancer. That one in four primary grade students in the area have been classified as obese, an established contributory factor for both diabetes and heart disease, does not bode well. Residents of the communities closest to the museum



Students from P.S. 31R revel in an afterschool program at the museum where they get a chance to simply move around outside.

have diabetes-related hospitalizations at a rate that ranges from 25 percent to 35 percent higher than New York City's average.

Lifestyle choices that figure in childhood obesity include sedentary behavior and the shift toward leisure time activities such as watching television and playing computer and video games. Issues of safety and access to suitable sports activities further reduce participation in athletics and exercise. BBM provides low-moderate income (LMI) children with a non-judgmental framework within which they can express themselves, learn how choices may affect their health and empower themselves to make positive decisions about their lifestyle. Children get the message that they can influence their health for a lifetime by making changes now that are enjoyable and enriching. The children are exposed to a variety of physical activities, encouraged to try tasty and nutritious food that they prepare themselves, are introduced to positive ways to deal with stress and anger—everyday occurrences in their lives—and are given an understanding of the scientific principles related to good health.

The Program and Its Partners

During the 2004-2005 school year, the museum presented an early iteration of the current program, Building a Better Me Mind, Body & Spirit, at P.S. 57R, a Title I school adjacent to a housing project rife with drugs and violence, as part of a privately funded afterschool remediation and enrichment program. While it offered sessions devoted to aerobic activities such as Tae Kwon Do and cheerleading, the pilot program focused more on mind and spirit than on body: a juggler modeled amazing powers of concentration; a unit on anger management explored the consequences of aggression and the positive choices that can be made when encountering it. One element of the program, a unit on healthy foods and no cook-or little cook-cooking, shares with the current program an emphasis on lifestyle choices. For example, children learned about healthy foods that they could prepare safely for themselves in the absence of adult supervision. The program lost funding after its first year, but was re-established with funding from CASA (Cultural After-School Adventures), a city council initiative that partnered the city's cultural institutions with the department of education in afterschool settings.

In the 2005-2006 school year, the museum initiated Building a Better Me (BBM) at P.S. 31R, a Title I school just steps from Jersey

Street, a location synonymous with poverty and drug use. A majority of the children in the BBM program are from single parent—or grandparent—families or from families where both parents are working. Of the students enrolled, 99 percent are eligible for free or reduced cost lunch (the few ineligible students are mainly students in a district-wide gifted and talented program brought to the school from out of the neighborhood).

The Building a Better Me program took place at the school for two hours on Tuesday, Wednesday and Thursday afternoons over a six-month period, serving seventy-five students in grades one to three. In addition, the students visited the museum with their families four times in the course of the program.

This time, instead of hiring athletes, performers and instructors, the museum collaborated with other community organizations—the American Cancer Society, the Jewish Community Center and the Staten Island Heart Society. The collaboration brought together organizations with areas of expertise in health education and recreation, and, of course, the children's museum's extensive experience in multi-disciplinary programming. Originally, the museum convened the group in response to a New York State Health Department RFP for childhood obesity prevention programs. At the first meeting of this *ad hoc* consortium, the partners decided that they were not prepared to develop a proposal for such an ambitious project, let alone implement it! But joining forces for a program on the scale of BBM seemed like a logical way to test our ability to collaborate and to eventually take the program to the next level. Mood Management program with a curriculum developed by the museum's Teen Ambassadors, an elite team of former interns, who borrowed from the training they received as interns and distilled it all into a powerful program.

The BBM program was divided into three components: health and nutrition, aerobic exercise and relaxation/concentration. Each had particular value to the participants. Beyond its primary, healthrelated goals, the program addressed the city's and state's curriculum and standards for the early grades in the areas of science, physical educations and the arts, as well as reading and writing.

The most academic portion of the program, health and nutrition, was bolstered by very unbookish activities. Predictably, the students enjoyed the hands-on portion of the lessons, which were less like science experiments and more like fun, memorable experiences that reinforced the learning outcomes. The museum's history of making learning fun came into play. When teaching about the human body, the rule of thumb is the grosser the activity, the better it is received. Why merely sniff the usual assortment of fragrances, when you have opportunity to make mucus? Or, would it be fair to teach about the sense of touch (and the body's largest organ, skin) without making scabs? Why limit the touch test to hot and cold when you can use "good" versus "yucky?" These kind of experiences become indelibly imprinted on kids' brains.

While the science of nutrition—food groups, nutrients, etc. may be as dry as day-old toast, hands-on activities such as cooking and menu planning have an unlimited potential for fun. Implementing

Feedback from the pilot program indicated the kind of changes from which the program would benefit, e.g., more physical activities. The partners offered their experience in the field as well as new ideas and approaches. For example, the American Cancer Society had an age-appropriate curriculum that had been perfected with the extensive resources of their national organization. With a single staff member and an active board president, who was a cardiologist and husband of a former museum trustee, the Staten Island Heart Association was willing to re-tool a program that they had done with older children and interns at a local hospital years before. The Jewish Community Center, a multi-service communitybased organization, had access to fitness professionals with good credentials who also had experience working with children. In addition to the pilot curriculum, the children's museum had another element to contribute: a Constructive



During a field trip to a nearby farm, kids get a chance to carry water the old-fashioned way.

Field trips to a farm or an aquarium, for example, contribute to the success of the program for two reasons: 1) they encourage parental involvement and 2) the impact of even short trips to new (to them) places significantly boost children's enthusiasm for learning new material. Some field trips required funding; others had no costs associated with them or were donated, such as a Family Day at the JCC for program participants and their families. a balanced diet is out of most children's hands (almost all of the P.S. 31 students receive free or reduced price lunch and many have breakfast at the school as well), but making fruit smoothies is fun and empowering, and it models a choice that children may be able make in their own lives—at least sometimes.

Naturally, aerobic exercise appealed to children who had been sitting in a classroom all day. Many were happy to channel their pent up energy into conventional exercise techniques or sports. Overweight and inactive children-those who were in the greatest danger of developing health problems- were, predictably, a greater challenge. Many of them were self-conscious and lacked confidence in their athletic abilities, but they became highly motivated to move around when the activity was put in the context of hip hop music or dancercise.

The quietest and perhaps most introverted activity, yoga, was a somewhat surprising hit, given the age of the students. They recognized that with practice three-part breathing gave them the power to calm themselves. At first, attempts at stretching and posing were occasions for giggling and clowning, but as the year progressed, the internally imposed peace translated into a quieter, more self-disciplined group. *Namaste.* Having shown their appreciation for the benefits of yoga, we know now that children will probably flip out over meditation—in a quiet, centered way, of course.

Impact on Children and Their Families

At the end of the twenty-five weeks, the children had learned that they *can* reshape their lifestyles and improve their health right now, though perhaps they did not fully comprehend the full impact of these choices on their destiny. As expected, while it is important that they know the compelling reasons for making certain choices, the things that are the most fun to do are the new behaviors that children are most likely to practice now and in the future.

As an expression of their confidence in their newly-learned skills and brimming with fresh health information, they expressed intentions to get their families involved in healthy lifestyles and to teach them what they had learned from this program. To aid in this quest, students took home the binder they had compiled of activities from the health and nutrition component. They were also given simple exercise equipment, such as a pedometer, and an exercise DVD developed for this program. The students demonstrated their new skills at a year-end performance presented to their parents and siblings.

Program evaluation is still in need of further development. Some evaluation components could be programmatic. For example, measuring kids' body mass index, their weight and lung capacity—before and after their program involvement—could provide objective evidence (to them and to the museum) of a student's adherence to healthy practices and potentially of our success at helping to modify their behavior. Documenting the program with video and still photography is another opportunity for measuring and recording improvement. Given the opportunity, the museum will benchmark other components of the program and develop evaluation tools.

REPLICATION TIPS

CURRICULUM

Building a Better Me is an easy program to replicate in your community or at your museum—with the help of other community organizations, a cooperative school or school system and a modicum of tangible resources. At present, the Staten Island Children's Museum has an unedited manual of the lesson plans, including projects, handouts and even an exercise DVD for use in classrooms, that could be made available as a base from which other museums can expand.

In hindsight, it became apparent that literacy was an important prerequisite for some of the activities. Ideally, this program would be limited to third, fourth and fifth graders. Older students benefit from more hands-on scientific inquiry, and most of them have sufficient reading skills by that time.

PARTNERS AND PRIORITIES

Convening a meeting with organizations that share an interest in the program's goals is a good start. Knowledge of local public health issues can create a priority among competing needs and can direct the emphasis on one or another components. For example, Staten Island has a distressingly high percentage of smokers (greater than the other boroughs of New York City) and a correspondingly high rate of lung cancer, so we were fairly sure that the local branch of the American Cancer Society would have materials that have been tried out in local classrooms as well as experienced health educators on staff to lead programs or at least train museum educators to lead them. Staten Island's Jewish Community Center had the resources to put together an exercise program that met the project's needs, but that role could also be filled by any local parks and recreation department or by volunteers who are fitness enthusiasts, eliminating or reducing expenses. It is important to include experts, such as professional fitness trainers or coaches, at least in the planning stages, to ensure the safety of the children.

The support of the school administration and, if applicable, the OST (out-of-school time) provider, is critical to the success of the program. Programs such as BBM demand flexibility and patience. It is also essential to understand the local and often irrevocable programmatic ground rules among the schools or community centers with which you work. Typical requirements could include a firm commitment to a consistent space or spaces in the facility— with storage. Buy-in from school personnel—teachers, aides or janitors who often must be present for compliance with local regulations—is simply priceless.

APPEALING TO—AND RETAINING—KIDS

The most difficult element to control is maintaining a stable roster of students enrolled in the program. Children who disappear and reappear are less likely to profit from the program; they also detract from their fellow students' experience. This is mostly a problem in larger schools where afterschool programs may offer many different kinds of activities happening simultaneously. In neighborhoods where families relocate frequently, this is an ongoing problem that cannot be solved easily.

FIELD TRIPS

Children love taking part in activities at the museum, but they also appreciate opportunities to take trips, even short ones to local health- or food-focused spots. Many kids in low-income communities have rarely been anywhere outside their neighborhoods. It's very important to plan field trips well in advance. On Staten Island, public and parochial schools share the same buses, so securing a bus on a schoolday is difficult. Field trips to a farm or an aquarium, for example, contribute to the success of the program for two reasons: 1) they encourage parental involvement, and 2) the impact of even short trips to new (to them) places significantly boost children's enthusiasm for learning new material. Some field trips required funding; others had no costs associated with them or were donated, such as a Family Day at the JCC for program participants and their families.

Museum health and wellness programs that take root in the museum or in the community

A Hands-On Approach to Health and Fitness

Minnesota Children's Museum St. Paul, Minnesota

Shoghig Berberian, Education Services Manager

earning to live a healthy and physically active life begins during the early years. Health and fitness education, one of Minnesota Children's Museum's five key focus areas, is part of its mission to spark children's learning through play. In its twenty-sixth year located in the heart of downtown St. Paul, Minnesota, the museum is a place where children can touch, climb, splash, crawl, push, pull and press it all. The museum's urban location draws a diverse population of families, schools and groups with children ranging from six months to ten years of age.

The museum's 65,000 square feet of exhibit space houses four permanent galleries, two traveling exhibit spaces and three program classrooms. In 2007, the museum served approximately 402,000 visitors, of which 64,000 were school groups. The museum offers content-based, drop-in classroom or facilitated gallery programs for general visitors and school groups. In addition, both on- and offsite educational programs such as Museum-to-Go classes, discovery trunks and professional development workshops cover topics of science, art and music, social studies, health and fitness, math and language arts.

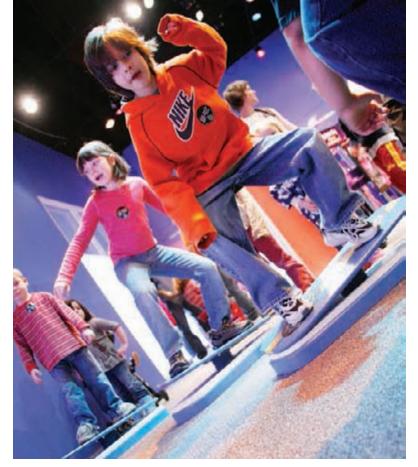
The museum's partner organizations (school districts, Head Start sites, early childhood family education programs and educators) expressed a need for additional support and developmentally appropriate practices in the topic of health and fitness. In 2002, the museum hosted the exhibit *Body Odyssey*, developed by the Children's Museum of Manhattan, that explored the scientific processes and dramas that occur constantly within the human body. This exhibit prompted the development of a series of programming curricula based on health and fitness for students and educators.

Responding to needs targeted by staff, the educational programming development process mines the museum's permanent galleries and traveling exhibits, seeks alignment with state academic standards and uses the Minnesota Early Childhood Indicators of Progress (ECIPs) for informal learning experiences. Program curricula identify goals and messages, learning concepts, target audience, activity descriptions, implementation procedures, materials and books.

Responding to needs targeted by staff, the educational programming development process mines the museum's permanent galleries and traveling exhibits, seeks alignment with state academic standards and uses the Minnesota Early Childhood Indicators of Progress (ECIPs) for informal learning experiences. Currently, the museum provides a series of health and fitness programs through a museum class, a curriculum guide, a discovery trunk, a grant-funded program, a museum-to-go class, professional development workshops, an exhibit and daily drop-in programs.

Museum Class

The first phase of the series, the Hands-On Health museum class, is a content-rich, forty-fiveminute, preregistration required program facilitated by a museum



In the exhibit Run! Jump! Fly! Adventures in Action, kids try out simulated snowboards on the (solid) museum floor.

instructor in a classroom that includes time to explore the museum. Each museum class consists of a ten-minute introduction or group activity on the topic, four to five stations or centers for small group participation (thirty minutes) and a closing or reflection activity for the whole group. Curriculum content is aligned with national and state standards for health, science and physical education. There are two class levels: pre-K to K and grades one through four.

The class begins with a discussion of the body's systems—nervous, muscular, digestive, circulatory, skeletal and respiratory. The closing activity leads students in the recitation of a healthy practice poem. The stations/centers incorporate activities based on fitness, nutrition, parts of the body and healthy practices. For example, using glitter, students learn how easily germs are passed from one person to another. Each student selects a different color glitter, rubs a small amount into his or her hands and "passes the germs" to other students by shaking their hands. Photos of different types of bacteria are included to provide a connection to the "glitter germs."

Curriculum Guide

A companion piece to the museum class is the curriculum guide which contains pre- and post-visit activities and a bibliography. Previsit activities include experimenting with chicken bones, vinegar and water to understand the importance of calcium-rich foods and measuring the amount of blood in a body using water and red food coloring. Post-visit activities provide opportunities to extend the learning back in the classroom with activities such as making "scabs," testing flexibility and demonstrating the digestive process using sugar cubes. There is also a take-home activity for families to do together. The guide creates a multiple-layered impact and heightens awareness of crucial health topics.

Discovery Trunk

The second phase of the series is the Hands-On Health Discovery Trunk, a self-contained unit that includes a variety of authentic objects, books, music, costumes, games and/or educational materials accompanied by interdisciplinary lesson plans. Lesson plan activities can be used at learning stations/centers, in small groups or with whole classes and are adaptable to meet the needs of children with different learning styles. The health trunk's lesson plan focuses on body systems, nutrition, fitness and learning how choices impact health. For instance, the discovery trunk contains a classroom set of pedometers for students to wear to see how many steps they take on average. They are asked to set new goals for steps during the next few days to see if they can increase their number of steps; they discuss their results and extend the activity further by keeping a physical activity journal at school.

Grant-Funded Program

The majority of the museum class and the discovery trunk were funded through a \$10,000 General Mills Champions Youth Nutrition and Fitness grant. Funding covered staff time (approximately 500 hours for research, development, evaluation and implementation), materials for two discovery trunks and two sets of museum class supplies, museum admission costs, the cost of bus transportation and stipends for teachers.

The Hands-On Health pilot program targeted 320 second grade students from five public schools, balancing racial, ethnic and gender diversity. The goal was to help prepare students for the health performance assessment they would be required to pass in third grade. After initial work with this target group, the museum enhanced the curriculum and made it widely available to other schools in the state with similar needs.

In the fall of 2003, the Hands-On Health pilot program launched a staff development workshop for second grade teachers and physical education teachers on nutrition and body systems as they relate to fitness education. Parent field trip chaperones were invited to attend the training. Teachers came from schools with the greatest need, as identified by the museum education staff, the district science liaison and the curriculum specialist for K-12 health and physical education for Minneapolis Public Schools.

New programs took place in regular classrooms, in physical education programs and at the museum. This four-week curriculum unit was comprised of the Hands-On Health Discovery Trunk, four Family Science StoryPacksTM (a smaller version of the Discovery Trunk containing books and activities) for small group work and a Hands-On Health museum class and self-guided visit. Materials were sent home to families to reinforce the nutrition and fitness messages.

During the self-guided portion of their museum visit, students practiced shopping for groceries and preparing a nutritious meal in the *Our World* gallery kitchen and restaurant. They role-played a visit to the doctor's office. The immersive, playful and engaging learning environment kept the students motivated and also provided an opportunity for them to use their knowledge about the role of nutrition and exercise in being healthy. The Hands-On Health pilot program allowed the museum to increase the depth of each of these individual programs and to collaborate for the first time using expertise from nutrition and physical education specialists.

Program evaluation revealed that on average each school utilized

the Discovery Trunk for forty-two hours over the course of four weeks. Physical education teachers incorporated museum activities into their lessons, including monitoring the heart rate while resting versus exercising and performing and tracking the duration of a variety of fitness activities. In addition, sixteen classes were taught at the museum to 320 students, who, as a result of their participation in the program, were able to meet school-based objectives. They were able to define nutrition, understand how the body used food and how various foods contribute to health, demonstrate their new knowledge of good nutrition choices, identify body parts and functions in relation to movement and test the impact of exercise on their bodies by comparing their heartbeat before and after exercise.

In addition, students and their families kept a daily journal of the foods students ate and the exercise s/he participated in during a three-day period—one journal before and one after the program. Journals were compared, looking for positive changes in eating and exercise behavior. Post-journals showed an increased awareness in healthy behaviors in comparison to the pre-journals. In the classroom, students undertook a performance assessment in which they designed a nutritionally healthy meal of their choice and identified three exercises they would like to do regularly to improve their health.

Successful in meeting the needs of students in the Minneapolis Public School district, the Hands-On Health museum class has since been taught to more than 2,300 preschool through fourth grade students from the Twin Cities metro and outstate areas, and the Hands-On Health Discovery Trunk has served 2,100 students in their classrooms.

Museum-to-Go Class

The program slowly built on its early successes. In 2003, education staff created Museum-to-Go classes—outreach programs that take place at schools, daycares and other organizations—in response to a need to reach schools unable to pay transportation costs for student field trips. Museum-to-Go classes serve a maximum of thirty students per session ranging from preschool through fourth grade with a minimum of three sessions per setting. The cost of program development was minimal due in part to the existing museum class lesson plan and curriculum guide. The curriculum included the same activities as the in-museum classes, but the procedures were adapted to work more effectively in off-site settings. At this writing, Hands-On Health Museum-to-Go classes have served 900 students in their classrooms.

Professional Development Workshop

In 2007, a Hands-On Health Professional Development Workshop was added as the final piece in the series. This three-hour workshop serves preschool and kindergarten educators who need to maintain certification. Participants receive three clock hours towards one Continuing Education Unit (CEU). The hands-on curriculum includes the Minnesota Early Childhood Indicators of Progress, developmentally appropriate practices, learning concepts, vocabulary and station activities all based on health and fitness. Educators can try, first hand, the activities from the curriculum and learn effective teaching methods and ways to encourage student engagement.

Since the topic of healthy lives is one of the museum's five focus areas, a day-long professional development workshop was organized for all museum staff. Presenters from the American Heart Association spoke about childhood obesity; a Tai Chi instructor led staff through beginner moves. In addition, a group of museum staff facilitated three forty-five-minute workshops on health programming, visitor interactions and staff wellness, led tours through museum galleries to analyze physical activity opportunities and provided a healthy lunch—and pedometers—for museum staff.

Exhibit and Related Museum Class and Guide

In 2008, the museum developed a new traveling exhibit, *Run! Jump! Fly! Adventures in Action*, to inspire children ages five through twelve to get active. Premiering at the museum

for six months, the exhibit focuses on action adventures popular in children's books, movies and television. It features four adventure scenes—surfing/snowboarding, kung fu, a climbing canyon and flycycles (flying bicycles). Each area highlights a specific physical challenge—balance, strength, coordination or cardiovascular endurance. "Action star training" provides visitors with challenges that can be safely done at home such as yoga, dance and strength activities.

Focus on Fitness, a museum class and a curriculum guide, were created to accompany the exhibit. The class curriculum combined parts of the pre-existing Hands-On Health museum class curriculum with new fitness activities for first through fourth grade students. Enhancing and modifying what was already established decreased staff time and material expense. This retooled combination reduced staff costs by 50 percent; materials were less than \$200. Since it is designed to accompany a traveling exhibit, the curriculum used both national and state academic standards in physical fitness.

During the summer of 2008, the museum designed a related program for the Minneapolis Public Schools with goals similar to those of the Hands-On Health pilot program. Organizations serving high-need populations of children ages five to twelve were selected for a field trip visit to *Run! Jump! Fly!* and the rest of the museum. Groups have an option to participate in the Focus on Fitness museum class. This newest initiative introduces new organizations to museum resources, allows children to participate in physical activities in the museum and provides children with family resources to promote physical activity.

Daily Drop-in Programs

In addition to scheduled educational programming, there are many other ways to incorporate health and fitness into museums. Being active is fun. It makes you feel good. Museums can inspire children to see physical activity as something that's easy to do and something they like to do. In one of the museum's longest running daily programs, Big Fun!, activities from carpet skating to maneuvering through an obstacle course allow children "to shake out their sillies" and move their bodies through play. The program takes place in a large open area outside the galleries and is facilitated by trained floor staff twice daily. Big Fun! has a variety of large motor props and



Floor staff helps a young visitor engage in one of the large motor props used in Big Fun! programming, a series of daily drop-in activities designed to get everyone moving.

theme is less expensive than developing a completely new one. As the program grows and serves larger groups, it is essential to preserve best and developmentally appropriate practices and have an effective evaluation method to track results.

FOCUS ON A PARTNER—OR PARTNERS

Whether a partner comes from a formal learning setting such as a school district or a daycare, a local or regional health organization (American Heart Association, Alliance for a Healthier Generation, dental associations) and/or local businesses (hospitals, minor/major sports teams, sporting equipment stores, yoga instructors), find ones who have similar interests and goals for supporting the healthy lives of children. A partner's expertise can lessen the amount of development time. Depending on the scale/size of the program, partners may cover a share of the expenses or decide to jointly apply for a grant. The program development process should be a collaborative effort between both organizations and should include managers, curriculum developers and coordinators to determine content and logistics.

The most challenging part of the process is maintaining and growing the partnership. Each partner will encounter factors that impact the success or continuation of the partnership, such as budget cuts or change in direction of partner's focus area. It is important to meet on a regular basis and brainstorm alternative ideas such as including a third or fourth partner, seeking additional funding or modifying the program to meet current needs.

TRAIN STAFF

Whether the program is in a classroom facilitated by museum instructors or is a daily, drop-in program facilitated by floor staff or volunteers, comprehensive training is essential. Make time for it.

EVALUATE AND RETOOL AS NECESSARY

Program evaluation, through observations and/or surveys, can gauge impact and gather outcome data from the specific programs. For instance, the surveys for the Hands-On Health pilot program identified which Discovery Trunk activities and props were and were not effective. Teachers recommended additional concepts for the trunk curriculum and also requested supplementary background information on a particular concept area. Gathering and compiling survey data can be time-consuming and tedious but it is valuable in delivering a well-developed program.

manipulatives, as well as child-appropriate music to enhance the experience. In one year, Big Fun! engaged 33,885 children and adults over the course of 354 program hours.

REPLICATION TIPS

FIRST TAKE STOCK AND THEN PLAN

Before adding any new programming, it is important to identify how the program or series of programs will impact the museum and its audience. New programming typically increases core audience visits, reaches out to new audiences and typically has a positive effect on generated revenue. Building upon an existing program

More is More: One Curriculum/ Multiple Programs

The Children's Museum of Houston Houston, Texas

Cheryl McCallum, Director of Education

- 2001: Houston first cited as "fattest city in the nation." —Men's Fitness
- 2002: "The increase in obesity among American youth over the past two decades is dramatic-7% to 15.3% in children ages 6-11." -American Obesity Association
- 2003: "Researchers found that almost 50% of Houston area 4th graders were at risk or overweight, the highest in the state." -St. Luke's Episcopal Health Charities
- 2005: "Houston is the fattest city in what is becoming an increasingly fat country." --- CBS Evening News

long with other big cities in the U.S., Houston has its fair share of problems. Holding the moniker of "fattest city in the nation" for four of eight recent years is one of them. The good news is that Houstonians respond well to calls for action. There is a solid, concerted focus to increase the resources and programming needed to stem the obesity epidemic in Houston. The Children's Museum of Houston (CMH) has been a part of these efforts through partnerships, family programming and exhibits.

CMH has longstanding neighborhood-based programs that are provided through relationships with schools, libraries, childcare centers and other community-based organizations such as the YMCA and Boys and Girls Clubs. In addition to the museum's onsite annual attendance of more than 600,000 visitors, CMH provides offsite programming in more than 120 locations to an audience of 150,000 children and families. This full sphere of influence is now joined with the museum's health-promotion programs, which began as one program and grew into many.

The "Healthy" Evolution

Since the museum's inception in the early 1980s, one facet of its mission has been a commitment to programming that promotes healthy behaviors in children and families. With the first "fattest city in the nation" report in 2001, CMH began to increase its health promotion efforts with a newfound urgency.

The museum has five kiosks that rotate to branches in the Houston Public Library's thirty-six-branch system. These traveling displays enable the museum to share quality resources with parents throughout the city. Materials for the kiosks are selected and developed by the CMH Parent Resource Library staff. Since the Parent Resource Library is also a branch of Houston Public Library, the materials on each kiosk can be checked out with a library card and returned to the museum or to any other library branch within three weeks. The library transport system ensures that each resource gets back to its original kiosk location. Each kiosk holds approximately eighty books, half for children and half for parents, as well as pamphlets, flyers and a few toys. Each year CMH develops a new kiosk theme along with a related set of materials. In 2001, the new theme was Healthy Minds, Healthy Bodies.



At a Healthy Minds, Healthy Bodies Family Learning Event, a boy tests his strength lifting barbells.

The launch of the Healthy Minds, Healthy Bodies library kiosks triggered the development of a series of health-related events, each strategically integrated into one or more existing avenues of community outreach. This next step was to add a Healthy Minds, Healthy Bodies Parent Workshop to the current roster of seven other Parent Stars programs, each delivered by CMH bilingual education staff at local elementary schools. When schools join the fee-based Parent Stars program, each school's faculty chooses which parent workshop topic they want. Other topics include Family Communication, Discipline Techniques, Math Moments and Raising a Reader. On average, sixty of these programs are hosted annually on local school campuses. Each program consists of an introduction to the topic followed by several museum staff-led activities and discussions among participants to encourage parents' later use of the activities with their children at home. Through years of evaluation data, we know that parents do use the ideas and activities at home after the events. In her 2005 report, evaluator Eileen Coppola, Ph.D., of the Rice University Center for Education, states that "96 percent of parents report that they use what they learn at the Parent Stars workshops to facilitate math, science and literacy learning in their homes."

The third iteration of Healthy Minds, Healthy Bodies also was located in libraries through the Para los Niños program, started through an Institute for Museum and Library Services (IMLS) National Leadership Grant in 2004. With the success of the Parent Stars Parent Workshops, CMH and Houston Public Library forged a new partnership to bring these same eight workshops, now in Spanish, into library settings. Houston's large and steadily increasing first-generation Latino population has created a significant need for public libraries to provide resources and programming in Spanish. The Para los Niños program further reduced barriers by presenting this free,

Since the museum's inception in the early 1980s, one facet of its mission has been a commitment to programming that promotes healthy behaviors in children and families. With the first "fattest city in the nation" report in 2001, CMH began to increase its health promotion efforts with a newfound urgency.

neighborhood programming in settings that people already visited and trusted.

To facilitate this new version of service through libraries, the museum developed toolkits for each workshop. In most cases, the program is delivered by librarians, many of whom are not trained educators. The toolkits are basically instruction manuals that provide all of the necessary information for an inexperienced educator to lead a parent workshop. Through funding from IMLS, toolkit materials are also available to anyone at no cost on the CMH Web site. The materials are accessible in both English and Spanish, and CMH staff is available to help answer questions if needed. Museums are encouraged to use this in partnership with their local public library, but workshops do not have to be implemented with a specific partner.

Similar to the Parent Stars Parent Workshop, the Healthy Minds, Healthy Bodies Para los Niños workshop starts with a theme-based story read aloud. Facilitators can select from among three suggested books. Relevant titles typically found in library collections include Marc Brown's D. W. the Picky Eater or Eric Carle's De la cabeza a los pies (From Head to Toe). Then parents receive the Healthy Minds, Healthy Bodies flyer that lists the main points of the workshop (how brain development affects healthy habits; healthy eating and exercise using both small and large muscle groups). Facilitators discuss these ideas with participants, suggest additional resources and then lead session activities. Six health-promoting activities are set up on tables around the room; parents roam the room and engage in each of the activities as a means of preparing to facilitate them with their children at home. All activities can be easily replicated by parents using very basic household items. As parents engage in each activity, museum and/or library staff discuss and model the role that parents might play with their children when doing the activities at home. After the workshop, families can check out the books and initiate several related activities at home. They can make a collage of healthy, good foods from pictures in magazines or newspapers. They can go on a mission to collect healthy foods that they have in their home. Since they have the library book for three weeks, families can read the book over and over and find a new healthy food to try each day. One activity, called Breakfast Sweets,





The library-based kiosk, above, part of The Children's Museum of Houston's Parent Resource Library, is stocked with books and materials centered around the theme of Healthy Mind, Healthy Body. This program later evolved into Para los Niños, a museum outreach program delivered in both Spanish and English. A young Para los Niños workshop participant, below, takes his library books home. Books and other materials can be returned to the museum or any branch library.

"Repurposing" is something that the museum does naturally and strategically. Whenever a good idea is identified, it is applied in every way staff can think of. Funders seem to value this approach and have funded the adaptation of existing programs for new audiences. For the past five years, CMH staff members have worked to develop "strands" of programs, referred to by staff as "centers of expertise." asks families to collect breakfast foods in their home and shows them how to graph the sugar content of each food. Both of these activities can be done without purchasing anything in addition to what families already have on hand.

As with the other Healthy Minds, Healthy Bodies program formats, CMH has conducted evaluations related to the program's impacts on parent understandings, attitudes and behaviors. Cecilia Garibay of the Garibay Group in Chicago conducted the formative and summative evaluation of the Para los Niños program. Her final report discussed many findings, but in summary, she reported that the Para los Niños program "prompts parents to adopt new interaction techniques that in turn cause their children to gain selfconfidence and develop new cognitive and social skills."

The Next "Healthy" Steps

The three Healthy Minds, Healthy Bodies programs described so far were developed during a time of intensive growth in the museum's audiences, both on- and offsite. Since the museum opened in the early 1980s, its audience has steadily increased. In the early 1990s, demand outgrew the original facility; demand surpassed the capacity of its second expanded facility in Houston's museum district by 2000.

The newest CMH iteration opened in March 2009. Aggressive audience growth coupled with facility capacity issues led the museum to develop an unspoken philosophy of "more is more." Starting in 1997, staff began making strategic changes to existing galleries and other public spaces in order to better accommodate the crowds. The addition of more activities created a programmatic density that better served the number of people coming through the doors and also extended into the museum's offsite program growth.

Programmatic additions mushroomed throughout the community. During this time of rapid growth, CMH programs were often developed and implemented based on partnerships and opportunities rather than their strategic connections to the museum's exhibit platforms. Through a 2005 initiative, at the same time that the museum's third capital campaign was launched, CMH staff began retooling and focusing its programs toward strategic connections to museum exhibits. Titled DEEP (Design for Innovation, Exceed Expectations, Personalize the Learning), the initiative is grounded in the Constructivist notion that the frequency and variety of experiences with a certain concept have a significant influence on the learning related to that concept. What does DEEP do for the Healthy Minds, Healthy Bodies programs? It joins them with an exhibit related to the same theme. As a result, a family could experience the museum's health programming in five different formats, two of which are described below as the next steps in the healthy programs evolution.

During 2005 planning for CMH's second expansion, staff met with long-term partners at Baylor College of Medicine to discuss collaborating on new programming and exhibits. That meeting was the start of two new health initiative efforts:

1) the new *PowerPlay* exhibit, funded by a Science Education Partnership Award from the National Center for Research Resources of the NIH; and

2) the associated PowerUP! Family Learning Event and *Family Activity Guide*, funded by the National Space Biomedical Research Institute.

The PowerUP! partnership with Baylor resulted in a new offering to the previously described Parent Stars program and their related Family Learning Events. Parent Stars Workshops tend to be smaller with an audience primarily of parents, most without their children. Family Learning Events are much larger and serve whole families. The PowerUP! Family Learning Event is now one of ten Family Learning Events that schools can choose from annually.

Set up like a mini-children's museum and usually in a school cafeteria, each Family Learning Event features ten to fifteen table-top activities. Parents come with their children, normally in the evening, and do the activities for an hour or more as a family. Museum staff members and school faculty interact with the parents and help with the activities as needed, but parents are the primary facilitators of learning. As the families leave, they are given the related *Family Activity Guide* so that they can replicate event activities at home and try out some new ones. Following the toolkit format, each activity uses simple materials that can easily be found or created at home. The *PowerUP! Family Activity Guide* also is available for purchase through the museum's gift shop. (CMH offers a video and training manual that describe how other museums can implement Family Learning Events in their communities. For more information on any of these materials, call the museum.)

CMH's 2009 healthy program addition is an even bolder step. A 4,225-square-foot, two-story, three-level, bilingual English/Spanish exhibit, *PowerPlay*, encourages children to "measure their bodies responses to physical challenges." In *PowerPlay*, families can participate in more than twenty different physical challenges and record their bodies' responses. Data is recorded through an electronic system in which visitors insert barcoded cards to record their heart rate and other measures. This data can then be accessed through *PowerPlay's* Power Science Lab, facilitated by Baylor College of Medicine students. Visitors can print out an analysis of the data before leaving the exhibit. They can also access their information through the Internet after their visit to further explore their health measurements in a variety of ways.

Prior research into visitor response to CMH exhibits, conducted by Hersh Waxman, Ph.D., of the University of Houston College of Education, has confirmed that 82 percent of parents indicate that they do things at home to extend the learning that began at the museum. When reports are available on *PowerPlay*, the museum hopes to see that the clustering of the museum's onsite and offsite healthy programming will increase this percentage of post-visit learning and that positive behaviors related specifically to healthy exercise and eating will also proliferate.

REPLICATION TIPS

For museums interested in replicating the CMH Healthy Minds, Healthy Bodies work directly, the Para los Niños Web site link, www. cmhouston.org/losninos/, is a helpful free resource, as is the *PowerUP! Family Activity Guide* available through the CMH gift shop.

But, the nugget of this story is how one small event or activity can grow into something much larger and more comprehensive over time. CMH did not have a strategic plan to grow the museum's health-related work at the beginning of Healthy Minds, Healthy Bodies. The process of growth has been a little more organic—it has meandered in response to myriad needs rather than follow a linear, step-by-step plan.

Five earlier kiosks predated the Healthy Minds, Healthy Bodies materials collection that populated them in 2001. From the fourpage flyer that staff developed for the Healthy Minds, Healthy Bodies kiosk, the Parent Stars Workshop was born, followed by the Para los Niños version. The Baylor program partnerships happened because we described some of the museum's health-related work to partners there, who immediately saw connections to some of their own work.

This type of growth is hard to describe in a specific replication plan, but the keys to this growth are clear. CMH tends to be entrepreneurial. When opportunities present themselves, staff members bend over backwards to make good use of them. Some ideas flop, but since staff is accustomed to generating and welcoming new ideas, many of them end up as part of the museum's mix of partnerships and programs. "Repurposing" is something that the museum does naturally and strategically. Whenever a good idea is identified, it is applied in every way staff can think of. Funders seem to value this approach and have funded the adaptation of existing programs for new audiences. For the past five years, CMH staff members have worked to develop "strands" of programs, referred to by staff as "centers of expertise." The Healthy Minds, Healthy Bodies strand began before these centers were even named as such. Healthy Minds, Healthy Bodies is a good example of how following a course of action that involves improvement, adaptation and expansion, rather than always creating something brand new, can lead to more innovative and longer lasting programs.



Special events Museum programs that blossom with health and wellness activities

ith emphasis on increasing healthy outdoor experiences for the whole family, Hop, Skip and a Jump Start, a 5K fun run/walk, was inaugurated in September 2007. Fun activities focus on the joys of healthy competition, the pride in engaging in exercise and how tasty and easy it can be to make wise diet decisions. The 5K course begins and ends on the museum's plaza and progresses along the Platte River under shady trees growing on protected park



Kids of all ages and their parents run for fun on a bright September day in Denver.

Hop, Skip and a Jump Sta The Children's Museum of Denver Denver, Colorado Nell Roberts, Major Gifts Manager

land. The course is filled with lots of whimsical wonders designed to encourage participants to chuckle their way to the finish. Featuring a Kid Course, a Toddler Trot and an Infant Crawl, it is the first event in the region that addresses health and nutrition for ages 0-100, including the littlest participants who might wobble to the finish line.

The Museum and Its Health Focus

The Children's Museum of Denver (CMD) was born in 1973. Largely conceptual in its first years, CMD's programs first reached the metro area's children via a converted school bus. The museum is now vastly different and serves more than 275,000 children and caregivers per year in one of the most colorful buildings in Denver's skyline. Built in 1984, the facility is located minutes from the heart of downtown, adjacent to the interstate, and borders one of the city's largest parks. The museum focuses on the milestones that children reach from ages zero to eight and connects with caregivers by offering

The 5K itself is truly the family-friendliest run in Colorado. Runners push their strollers past mile markers along the Platte River, some stopping just before the finish line to cross it with their toddler hand-in-hand. There are fun surprises along the way to excite children, make the adult laugh and provide a break for tired little (and big) legs. resources and guidance on child interaction, emotional and skill development and the education of young minds.

Although childhood obesity rates in Colorado are among the lowest in the country, they are still on the rise. This upward trend, combined with increased food costs affecting family shopping decisions and schools struggling to meet health standards in their cafeterias, has motivated staff to incorporate lessons on healthy living throughout the museum's exhibits and programs. Stuffee, a giant doll whose tummy unzips to reveal removable internal organs, departs for outreaches to help demonstrate to children the processes of respiration, digestion and blood circulation. The program meets Colorado's science, music and physical fitness content standards as well as improves body awareness by making connections between nutrition and performance. The museum's two playscape exhibits, My Market and Making the Team, both promote healthy diet and exercise decisions. My Market is just as it sounds: a mini-grocery store where children sort vegetables, count milk jugs, prepare meals in the bakery and role-play everyone from stock persons to cashiers. This provides the perfect opportunity for caregivers

to talk with their kids about foods that are delicious *and* healthy and foods that comprise unwise diet decisions. *Making the Team* is a popular pint-sized basketball court where children don jerseys and sink some hoops. Players use teamwork while they engage in several healthy body interactives related to growth, speed and agility. The museum's café offers healthy, affordable food options, such as snacks low in fat, sandwiches with whole wheat bread and juices without added sugars.

Program Details

Hop, Skip and a Jump Start came into being due to guest and donor requests. Colorado is teeming with athletic events year-round, from the Furry Scurry two-miler that can be made with a pet alongside to Rudolph's Revenge 10K/5K in December. More than 300 runs take place each year from Fort Collins to Crested Butte. From among the many museum supporters who participate in several races every year, one group came to the development staff and suggested that the time had come for the museum to join the fun. From the beginning, their enthusiastic and knowledgeable support has been very helpful. Runners are not only the best word-of-mouth advertising, but they can assist with deeper fundraising efforts such as corporate sponsorships and pledge solicitations.

The early fall date was picked for several reasons. Weather-wise in Denver, summer and fall are the most dependable times of year for outdoor events. Adults can weather just about anything, but babies need a more temperate environment when playing outdoors. The museum's largest annual fundraiser is in May and there is another fundraiser in October, so it was important to have plenty of time in between each of these events to alleviate staff stress as well as not tap into our donor base too frequently. Lastly, many of our supporters tend to travel in the summer when school's out, so families are easier to reach and engage in the fall.

The 5K itself is truly the family-friendliest run in Colorado. Runners push their strollers past mile markers along the Platte River, some stopping just before the finish line to cross it with their toddler hand-in-hand. There are fun surprises along the way to excite children, make the adult laugh and provide a break for tired little (and big) legs. These include a bubble machine to speed through, sidewalk hopscotch and sidewalk chalk, a piano mat that plays tunes as tiny toes tap the keys and costumed characters exclaiming "one more mile!" Grandparents walk the 5K course ready to jog with their grandkids over the finish line. Runners as young as seven have finished the entire 3.1 miles, and the first year's winner for adult women sprinted the entire course pushing a kid-loaded double stroller!

There are a handful of local athletic events that already involve young children. One triathlon looks more like the set of "Double Dare," and a dash for preschoolers takes place every Halloween. Because the museum's niche is serving children ages *zero* to four, the challenge arose: how to involve even younger kids in a 5K. So, with a little sense of humor, a ten-foot-long grass Infant Crawl track, painted all colors of the rainbow, was designed with lanes to keep order among the most fervent crawlers. That first year, tales were told about infants who "trained" to improve their crawling pace and parents who quickly signed up before realizing their baby hadn't yet crawled. The first place Infant Crawl winner, seven months old, was motivated by the sight of a handful of goldfish crackers and impressed many onlookers after crawling three yards in about four minutes.

With yet even more paint, hundreds of feet of flag banner and bibs that all read #1, toddlers to third graders run a fifty-yard loop in the park by the museum. The first year, a board member's fouryear-old was the first to finish the Toddler Trot and did so with a magnificent smile stretched across her face. There are no losers since none of the kids receives first, second or third place awards. Instead, they are each presented with certificates of achievement and "high fives" from a costumed character waiting at the finish. They all walk away with a sense of accomplishment, pride and triumph.

REPLICATION TIPS

MAP THE COURSE

Planning an athletic event is similar to other events: it's a stepby-step process. One thing's for sure—you can't have a run without a course. Our course is mapped on MapMyRun.com, an interactive Web site that utilizes street and satellite maps similar to Yahoo or Google maps. With the click of a mouse, you custom design a route and are provided with distance plots, topography, obstacles and points of interest.

HOW TO TIME THE RUNNERS

The equipment and know-how required to time a race can be vast and complicated, so the best solution is to find a race-timing company. These companies are relatively inexpensive, and, depending on your needs or budget, can offer one comprehensive package or bits of assistance with everything from online registration, printing bibs and of course, the actual timing.

FOCUS ON RACE DETAILS

The biggest challenge for any first-time event is trying to anticipate the smallest of details without the benefit of experience. Determining ahead of time seemingly small things like who is going to provide safety pins for the bibs can prevent lots of confusion, rushed trips to the store or unfortunate instances such as making runners carry their bib across the finish line. Who is going to mark the course? Where are the best places for water stations? Where might you need volunteers directing traffic? Are you providing prizes to the winners? Who's providing the music and sound system? Establish very open communication with your timing company to nail these details. They work at races year-round and can help anticipate the smallest factors.

HOW TO ATTRACT RUNNERS

Now you need runners. One reason runners come back to the same event every year is the t-shirt! This is tricky because you have to order shirts well in advance, and it is the biggest expense for a run. After projecting 150 participants, Hop, Skip and a Jump Start had about 125 participants its first year. Based on an industry standard that race registrations more than double in the last week, we ordered far too many t-shirts and had more than 100 extra after the event. We tried selling them in the gift shop; that was minimally successful. Trying to avoid costly over-ordering the second year, we were far more conservative and ordered approximately 230. With more than 260 participants, a rise of 108 percent over the previous year, we were short. A fortunate problem, indeed, but be sure to ask t-shirt printing companies what they charge for post-event reprints. Some don't require payment for set-ups twice, and this will save you plenty if you have the same situation.

Another reason that runners return year after year is the quality of the side events. The museum invites local grocers and sales reps to distribute healthy morsels to the participants. A costumed rabbit hands out organic carrots with the greens still attached. A tent is filled with healthy snacks, such as all-natural cheddar crackers, piles of organic apples and bananas, locally baked whole grain breads and vegetable juice as sweet as a fresh orange. The museum's plaza is tented for arts and crafts, such as making medals and constructing critters that tie to shoelaces. And since the 5K starts and stops at the museum, all participants are invited into the museum for loads more interactive play; admission is included in their registration.

PROMOTE THE EVENT

A local TV anchor, whose reputation is defined by an interest in athletics, emcees at Hop, Skip and a Jump Start. He convinced his news station to become the media sponsor, providing both on-air spots and Web site coverage. Contact local publications, newspapers, magazines and neighborhood weeklies to request advertising support. Local radio stations can play ads during morning and afternoon commutes. What are some unique ways to promote your event? In 2008 one Colorado running Web site gave away four registrations to people who filled out an online survey.

SET FEES

For Hop, Skip and a Jump Start, registration starts at \$25 per 5K participant and \$10 per child with a 5K adult registration. If a caregiver does not want to sign up for the 5K, they can still register their children for \$20 each. The price rises as the race gets closer. Denver is a very last-minute town, and when you have to print bibs to get ready to time runners, the less "walk-ups" you have, the better. At Hop, Skip and a Jump Start, pre-registration closes two days before the race. Late-comers have to pay an additional \$5 to register that morning. Motivating early registrations is the best way to ensure less scrambling at the last minute.

COVER COSTS / FUND RAISE

Runs are very expensive to plan. The Hop, Skip and Jump Start t-shirts alone consumed roughly 30 percent of the money raised through registration. Add to that the cost of city permits, security, EMT support, portable toilets, art consumables and finally serving guests inside the museum, and suddenly you're in the hole. This may not be the worst thing to happen. Hop, Skip and a Jump Start lost money its first year and continued to be approved by the board and senior staff with the intention of it being a mission-based accomplishment rather than a money-raiser. Regardless, creative spending and soliciting donations are the only ways to make it financially feasible. Request in-kind donations galore, from gift certificates for the winners to bagels for after the race. Ask for corporate sponsorships. Think of health-conscious companies, such as your organization's insurance provider or grocery stores that are family-friendly or have a health-food focus. Look to companies that provide services specific to children or families, such as a pediatric office or a child's hair salon, or companies that focus on physical activity, such as athletic stores. In addition to cash or in-kind contributions, companies can help drive traffic by arranging teams or providing volunteers. Another Web site, www.active.com, makes initiating pledge solicitations very easy.

FIND VOLUNTEERS

The utilization of lots of volunteers is vital. There are certain positions that require paid employees, such as cash handling or key directional course placements, but a lot of physical bodies are required to help set up and tear down the course, direct traffic, provide safety, distribute water at aid stations, facilitate art activities and even form a cheering section to motivate and improve the runners' experience. On the day of the event, Hop, Skip and a Jump Start asks between five and ten staff members and up to thirty-five volunteers to help. Ask volunteers to form a committee and to back the



Top, backed by their "trainers" (moms and dads!), babies limber up on the three-yard-long Infant Crawl course. The winner, bottom, motivated by goldfish crackers, crosses the finish line in a blazing four minutes.

Hop, Skip and a Jump Start is considered to be an outstanding success. Staff collected a number of guest evaluations the day of the first event. They revealed a composite score of 4.8 out of 5 for overall satisfaction. The event also engaged a number of new constituents. By recording the activity of constituents, from event participation to membership renewals, it was discovered that nearly half of the race participants were new to the museum's database and perhaps seeing the museum's playscapes for the first time.

event during the months prior. They may ask their friends to form a team or make donations on their behalf.

SAFETY AND SECURITY

Be sure to establish important safety practices and systems. While visiting the museum, all guests are given a sense of security that strangers will not be given access their children and accidental injuries will be addressed immediately by trained personnel. While you may want to provide that same level of safety and security for outdoor—and offsite—museum events, it is tricky controlling an environment that extends up to a mile away. All registrants sign a waiver before participating. Active.com has a standard format that can be used or tweaked. If you work with a race-timing company, they may have one as well.

One way to address potential safety issues is to require key staff to meet before the event to evaluate risks and then convene afterward to collect feedback and assess the performance of each aspect of the day. For example, there is a spot on the museum's course that is very narrow but still must accommodate two-way traffic. Particularly with so many strollers involved, it's important for volunteers to be present in this spot to warn runners as they approach it to avoid congestion. An unusual amount of congestion can affect the safety of your participants. In terms of post-race feedback, you might find that the placement of your registration tent is too close to the start line, for example, calling for adjustment for the next year. Or you might hear from the volunteers that the placement of a water station was not ideal for traffic or other logistic purposes.

Outcomes

Hop, Skip and a Jump Start is considered to be an outstanding success. Staff collected a number of guest evaluations the day of the first event. They revealed a composite score of 4.8 out of 5 for overall satisfaction. The event also engaged a number of new constituents. By recording the activity of constituents, from event participation to membership renewals, it was discovered that nearly half of the race participants were new to the museum's database and perhaps seeing the museum's playscapes for the first time. In 2008 more than 60 percent of registrations were from suburban

communities, not the museum's immediate neighborhoods. Several of the evaluations said that participants had such a great time that they will be back next year with friends.

While running a race is a lot of work, it connects deeply to the mission of the children's museum. Babies who participate or who are even just present witness good health practices at a very early age, instilling in them the importance of spending time outdoors and introducing them to being active for the sake of activity. Some tod-dlers and elementary students hold handmade signs for their moms or dads at the finish line or jog fifty yards with a grownup as cheering sections offer them "high-fives" and smiles. Scenes such as these impress onlookers, guests and supporters alike. The event is unique to the area. It's a genuinely fun way to be outdoors, exercising and accomplishing goals as a family.

assport to Play, created and sponsored by Mc-Donald's, takes a multicultural approach to physical education. Launched by McDonald's in 2005, the program has been on national tour making stops at ninety-six schools and through both onsite and outreach programming has reached seven million school children. While the program typically is offered directly to schools, McDonald's Restaurants of Hawaii offered the Hawaii Children's Discovery Center (HCDC) a chance to cosponsor the event because of the center's multicultural mission and health programming



Donning yellow and red pennies, girls divide up for a game of soccer in Kaka'ako Waterfront Park in downtown Honolulu.

Passport to Play

Hawaii Children's Discovery Center Honolulu, Hawaii

Loretta Yajima, President and CEO

initiatives. This was Passport to Play's first and only time in Hawaii. Needless to say, the expense of bringing the event to local venues is high, and only with our local McDonald's as a partner, was it possible for HCDC to do it.

What makes Passport to Play different from other programs, such as Nickelodeon's Worldwide Day of Play, is that McDonald's created a "stage set," complete with all of the equipment needed for the program, which they ship from venue to venue. They also provide staff that travels with the exhibit to train volunteers and teach the cultural games to the children. As the local sponsor, McDonald's Restaurants of Hawaii paid 100 percent of the costs for shipping, staffing and recruiting the volunteer manpower needed for the event. They also paid for the entire travel cost of air transportation for all school groups coming to the event from the neighboring Hawaiian Islands. And, because the event was designed to promote healthy and active lifestyles among children, McDonald's provided some of their healthy menu selections as snacks for the participants, including bottled water, milk and Apple Dippers. HCDC was responsible for communicating with teachers, disseminating information to the schools statewide and registering the children for the event. Both McDonald's of Hawaii and the Hawaii Children's Discovery Center shared responsibilities for overall planning and media coordination.

Passport to Play, designed to follow the key criteria outlined in the National Association for Sport and Physical Education's National Standards for Physical Education and the Mid-Continent Research for Education and Learning (McREL) Compendium of Education Standards, combines physical education, health, life skills, language arts, geography and art. An interactive cultural program, it teaches elementary school children, grades two to five, games that kids around the world play. This inspires them to have fun and learn while being active, getting in shape or at least becoming more interested in different types of exercise. Games from various countries include: Kids Decathlon (Greece), Tlatchtli (Mexico), Korfball (Holland), Buka Ball (Thailand), Old School Hoops (USA) and Mr. Daruma Fell Down (Japan). The program gives children "passports" to other countries and educates them about other people and cultures. This was a particularly good fit with the center's emphasis on diversity and multicultural programming.

McDonald's is committed to helping children lead balanced lives and increasing children's understanding of the importance of eating right and staying active. In recent years, McDonald's, known for its Big Macs and fries, has rounded out its menus by adding what many consider to be healthier food options—salads, Apple Dippers, etc. In addition, the company has added its voice to the push for ways to blend

fun with healthy choices and created programs such as Passport to Play. If anyone knows how to appeal to kids, it's McDonald's—its restaurants can be powerful allies in reaching young kids with important messages. At each event, Ronald McDonald encourages children to stay active and make good nutritional choices in their diets and informs parents of their role in helping to prevent childhood obesity. Locally, McDonald's Go ActiveTM with Ronald McDonald program provides a teacher's guide with lesson plans for fun activities teachers can do with their kids throughout the year. The program also provides some practical advice from its fitness partner, Bob Green (Oprah's personal trainer)—tips on how to lead a more balanced and active life, such as "Gradually add more and more variety to your diet. If you are trying to cut back on calories, drink water instead of soda and replace ice cream with low-fat yogurt and fruit."

The Center & Its Health Focus

The Hawaii Children's Discovery Center provides an exciting learning environment filled with hands-on, interactive exhibits for

children and families to learn and grow together through creative play. The center offers imaginative experiences that give children opportunities to develop self-awareness and evolve into independent thinkers. Inspiring families to adopt a healthy lifestyle by promoting awareness about nutrition and fitness is a full-time commitment at the center. Health messages are incorporated into all exhibits, family-friendly programs and special events

Although studies have linked physical activity to positive academic achievement, physical education takes a back seat in Hawaii. The state's public schools employ one physical education instructor for every 1,416 students for grades K–6.Additionally, there is intense concern about budget cuts affecting sports programs and physical education classes. such as Passport to Play. Exhibit areas include the following:

• Fantastic You contains a heart and lung exhibit that demonstrates how smoking cigarettes impacts heart health; the Feel Finer Diner, where children balance the number of calories they consume (food) against the number of calories they burn (exercise); Basketball Hoops, where children practice gross motor skills; Big Mouth Theater, which illustrates the importance of caring for teeth and gums; Body Cells, where children learn about germs and how to prevent them from spreading; Stuffee's Clinic, where children play the role of doctor, nurse or patient and discuss fears or concerns with their family about going to the doctor's office; and in the Tot Spot, where children practice water safety by wearing life vests while playing on the sailboat.

• Your Town features the *Bus*, where children learn about crosswalks, stopping for pedestrians and defensive driving; *Your Town Market*, where families make nutritious food choices by selecting wholesome items from the food pyramid and learn about fueling the body with fruits, vegetables, whole grains and lean meats; the *Fire Station*, which provides life-saving information about how to prevent home fires; and the *Police Station*, where children practice calling 911 and learn about where to get help and about accident prevention.

Additional fitness-oriented programs and special events include the Keiki Fun Run (Keiki is the Hawaiian word for baby or child), an annual kids' one-mile fundraiser run around Kaka'ako Park; Kid Fit, a weekly drop-in program designed to get kids moving through active group games; and Try-Fest, an opportunity for children to try new sport and fitness activities in a low-risk, cooperative environment.

Responding to National and Local Needs

An article in the *Honolulu Star Bulletin* (May 20, 2005) offered some disturbing facts that prompted the center join the national effort to curb childhood obesity.

• *The New England Journal of Medicine* calculated that within fifty years obesity will likely shorten the current average life span of seventy-seven years by at least two to five years. If this occurs, it will be the first time in two centuries that the current generation of children

will have shorter life expectancies than their parents.

• In Hawaii, half the adults are overweight or obese. The State Department of Health estimated in 2002 that nearly 30 percent of children entering kindergarten in Hawaii public schools were overweight or at risk of becoming so.

• A study conducted in 2004 found that 32 percent of Hawaii's children were overweight and 10 percent were obese by the time they reached their first birthdays. At age five, 14.6 percent were overweight and an alarming 19.2 percent were obese. This boils down to nearly one in every five children!

• Hawaii schools' commitment to academic accountability is not equal to its commitment to ensure a healthy environment. The schools' efforts have been limited to



Kids engaged in active play under the tent and in the waterfront park.

It has been clearly documented that obesity spawns a number of chronic diseases. The major health threat, especially among Asians and Pacific Islanders, is the early development of type II diabetes and other risk factors for heart disease.

imposing bans on school vending machines that dispense soda pop and sugary juices and offering healthier meals in their school lunch programs. Public schools do not provide enough exercise for children. Although studies have linked physical activity to positive academic achievement, physical education takes a back seat in Hawaii. The state's public schools employ one physical education instructor for every 1,416 students for grades K–6. Additionally, there is intense concern about budget cuts affecting sports programs and physical education classes.

It has been clearly documented that obesity spawns a number of chronic diseases. The major health threat, especially among Asians and Pacific Islanders, is the early development of type II diabetes and other risk factors for heart disease. One sobering statistic, according to Robert Hiam in his address at Hawaii Medical Service Association's annual membership meeting (*Honolulu Star Bulletin*; May 10, 2006) is that Hawaii leads the nation in obesity rates, especially among youth, with estimated costs of nearly \$300 million a year for related illnesses. Diabetes can lead to high blood pressure, kidney disease, stroke, limb amputations and blindness as well as heart disease.

These statistics led the Discovery Center to take a stand for healthy living. As a respected educational organization in the state and through its network of established community partners, the Hawaii Children's Discovery Center is an ideal venue for communicating important health messages through its exhibits, programs and special events designed to promote healthy lifestyles for families.

The Development Process

McDonald's of Hawaii and the Children's Discovery Center have been long-term community partners. McDonald's sponsored the center's library and participates in various programs throughout the year, such as the Keiki Costume Ball at Halloween. The company is always generous, donating coupons and other prizes for the center's special events. Veering from Passport to Play's typical school partnership arrangement, McDonald's chose the center as host to connect with a larger audience from all parts of the state. Using a

different venue offered new opportunities in terms of the scope and reach of the program; however, it also demanded more creativity and communication between the partnering organizations in order to inform local schools of this rare opportunity for kids. It also took a lot more coordination to manage many different groups in order to deliver a carefully planned event.

The Children's Discovery Center began by sending information to lead teachers within each grade level from grades two to five in each school, asking them to disseminate it to every teacher. The weekend event was to be held at the Children's Discovery Center in Kaka'ako Waterfront Park in downtown Honolulu. From 9:00 a.m. to 3:00 p.m. each day, seven sixty-minute sessions were offered. Each participating school would register for one hour-long session. Eight neighbor island schools were invited to participate, and the corporate sponsor funded their airfare, transportation, lunch and admission to the Discovery Center.

Center staff then followed up the initial invitation with phone calls to answer questions, provide information and rally teachers to support the program by encouraging the kids in their classes to participate. It proved to be a very challenging task to ask teachers, who are already overworked, to organize a class activity on a weekend. Initial registration numbers were low, so center staff then reached out to the physical education teacher at each school to appeal to their interest in student fitness. Unfortunately, many of the public schools no longer have P.E. teachers! In the end, the center opened up event registration to the general public, and McDonald's agreed to accommodate any overflow should people show up at the last minute. The center also provided a "Keiki Craft Tent" as an additional activity so that there would be things for younger siblings to do while the big kids participated in Passport to Play.

For two days, Kaka'ako Waterfront Park was a multicultural beehive of activity. In each interactive play session children played physical games from various cultures including China, Holland, Mexico and Thailand. Although the event was geared for children in grades two to five, it was very important to accommodate the entire family for a play day in the park. With thirty acres of park adjacent to the Children's Discovery Center and year-round sunshine, the HCDC takes advantage of the natural outdoor setting for safe family play activities and events as often as possible. As one of the first tenants in Kaka'ako Waterfront Park, an area of a major urban renewal effort led by the Hawaii Community Development Authority, the center works on building awareness of this outdoor space as a family gathering place.

Passport to Play supported the center's partnerships with schools, community groups and corporate sponsors and helped to increase access to underserved groups. In addition to underwriting transportation costs for children from other islands, corporate sponsorship gave all participants access to the Discovery Center's exhibits, where they could experience the *Fantastic You!* gallery focused on the wonders of the human body, which reinforced the event's core concepts of keeping fit and choosing nutritious foods.

The Outcomes: Institutional, Audience, Community, Staff

The success of Passport to Play inspired the museum to further expand its efforts to promote good health by:

• incorporating plans for a healthy Kid's Café into the Discovery Center's expansion;

• offering several summer camps and drop-in programs focused on world games and fitness activities;

• increasing awareness among staff of the importance of making visible to our guests the health messages already incorporated in our exhibits, programs and special events through facilitation; and

• increasing opportunities with new partners who are reaching out to us as collaborators in their health and fitness education programs targeted at children and families.

REPLICATION TIPS

Although Passport to Play is a unique program developed by McDonald's, similar programs have been developed by other children's museums that combine fun fitness activities with healthy eating messages. The Children's Discovery Center was fortunate to have a corporate sponsor for this event; however, it could be just as successful on a smaller scale with an energetic staff and well-researched curriculum developed solely in-house. While the introduction of world games presented on the Passport to Play Web site, www. Passport2Play.com, is not as exciting as having trained facilitators introduce the activities in person, using the information provided on this site is a good way to start the process for a museum interested in replicating this program.

FOCUS AND SPONSORSHIP

The key is to focus on what is unique to your museum and to your community. At the Hawaii Children's Discovery Center, our multicultural population pairs with our emphasis on inspiring families to make healthy lifestyle choices.

Identify a corporate partner—or partners—who share your vision of raising awareness and increasing participation in healthy living activities for families. Openly discuss the strengths of each partner and what each can contribute to the project. Clarify the roles of key players.

Due to HCDC's long-standing relationship with McDonald's of Hawaii, the partnership was a natural fit. The center knows the needs and expectations of families with young children and how to provide playful, age-appropriate learning experiences, while McDonald's provided a well-funded, interesting and effective program that incorporated multicultural fitness activities.

AUDIENCE

Use your program to attract new audiences. A key aspect of Passport to Play was the inclusion of the neighbor island children who do not often have access to the educational resources available on Oahu. This was very important to the Discovery Center. The children who joined the fun at Passport to Play had memorable experiences, and the multicultural games offered them exposure to many other cultures without leaving their own country. For some it was their first time in an airplane and to a new part of the state. While this multi-island community is unique to Hawaii, similar efforts could be made by other museums to attract children from different neighborhoods or even regions.

Although the primary focus of Passport to Play was for second to fifth grade children, don't forget to plan offerings that appeal to the whole family.

Although the Hawaii Children's Discovery Center is committed to promoting healthy lifestyles to young audiences, the center does not have the resources to make Passport to Play an annual event. But we now incorporate the health messages and physical activities introduced to us by the program throughout our museum. The introduction of other cultures appeals to young children who are curious and ready to learn and understand what makes each child, family, community and country similar and different to others around the world.

Worldwide Day of Play

Children's Discovery Museum Normal. Illinois

Heather Young, Public Affairs Coordinator

he mission of the Children's Discovery Museum (CDM), to "inspire the love of learning through the power of play," guides all programs, exhibits and events. In 2006, the American Heart Association asked the museum to participate in the Worldwide Day of Play (WWDOP) with an emphasis on fostering healthy behaviors. Who better in our community to take the lead in producing and hosting this event than a children's museum? It aligned with the museum's mission and also complemented the museum's newly identified Healthy Kids-Healthy Future initiative. The museum agreed to host WWDOP, and new community-focused partnerships began.

The Worldwide Day of Play, held on the last Saturday in September, is a three-hour event that encourages children, their families and friends to turn off all things electronic, get off the couch and go play. Historically, the Worldwide Day of Play began as a partnership between the Alliance for a Healthier Generation and Nickelodeon. Together they promoted this day of play and the Go Healthy Challenge. Nickelodeon televised pre-event programming that featured children adopting new healthy behaviors with positive outcomes. In addition, the "Nick" television channel went "black" for three hours on the day of play, with a scrolling message that encouraged children and families to get outside and play.

The Let's Just Play Go Healthy Challenge, a product of the Alliance for a Healthier Generation, was a multi-faceted national effort aimed at moving kids toward healthier lifestyles through better nutritional choices and physical activity. Children signed a pledge to live a healthier life, and the alliance used these signatures to estimate participation in the event on a national scale. In 2007, the Bloomington-Normal WWDOP drew more than 3,500 participants and forged new alliances among the museum, its local parks and recreation departments and Illinois State University.

The Museum and Its Environment

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The Children's Discovery Museum is located in Normal, Illinois, part of a twin city known as Bloomington-Normal that has a combined population of more than 110,000 people. It is home to Illinois State University (ISU), Illinois Wesleyan University and two community colleges, all of which use the museum for research, internships and service learning opportunities.

> The museum opened in 1994 and has moved twice to accommodate growing attendance, larger exhibit galleries and expanded educational



A college student from the Illinois State University Athletics Department leads kids through a flurry of activities on the Worldwide Day of Play.

services. The current facility, a LEED-certified building, opened in 2004 as the flagship development for the revitalization plan for uptown Normal. The 35,000-square-foot facility houses three floors and six exhibit galleries that encourage discovery and learning through experiences including health, science, agriculture, art, physics and the world around us.

The museum, now part of the Town of Normal's Parks and Recreation Department, has served more than 500,000 visitors in less than four years. Audiences vary from young parents and their infants and toddlers to grandparents entertaining children ranging in ages from infant to teen. School groups run the gamut from pre-K to junior high. An initiative established in summer 2008 encourages older children to visit the museum: FETCH!TM Lab activities plus several engineering camps are designed to draw "tween" age participants and their families.

The museum provides educational programs to more than 30,000 kids annually: Discovery Day Camps; summer science and art camps; baby, toddler and preschool monthly classes; scout badge programs; and homeschool science workshops. To that roster, the museum adds family fun events, such as the Worldwide Day of Play.

The health of children in the community is so important to the museum that in 2007 program plans were prioritized to address the dire state of obesity in 32.9 percent of local children as well as the alarming rate of bullying in schools. In response to both issues, identified as critical by the Centers for Disease Control and Prevention, CDM developed the Healthy Kids-Healthy Future initiative, a planned learning experience to assist in the development of the whole child surrounded by healthy relations, healthy families and a healthy community. The initiative includes an exhibit environment that encourages children's interaction with nature, affirmative relationships with others and healthy choices for themselves. Through a plan that includes community partnerships with FitKids activities, in conjunction with the local newspaper, The Pantagraph, and the Worldwide Day of Play, we hope to develop healthy new perspectives among kids on topics as basic as snacks and exercise.

Customizing a National Program for a Local Community

With the museum's focus on nurturing healthy children and families, staff wanted to take the Worldwide Day of Play and tailor it specially to the Bloomington-Normal community. Before we planned the event we clarified, in writing, why we wanted to do it in the first place. What need did it fill in our community? This mini-mission statement became the guiding force in all the decisions made to produce the WWDOP.

The Bloomington-Normal WWDOP Mission: We want kids to be healthier, to play more, to unplug from all the distractions that keep them indoors and inactive. This day could be the impetus for change that children and families need to exercise more, to use our parks and community's treasures more, to enjoy and interact with their families more, and to just go outside and play more.

We also knew we wanted to keep it inexpensive and simple with games and activities that did not have a lot of rules or expensive equipment.

The Development Process

Whenever we brainstorm potential new programs, events or even new exhibits, we always think about other groups or organizations that could contribute to—and benefit from—collaboration. The WWDOP would be stronger and would create a bigger stir if it became a broader community collaboration.

The first order of business was to secure partners interested in hosting WWDOP activities at their locations. Although a number of potential partners, large and small, was interested, we selected three organizations, all of which already provided recreational and sport

activities, had the health and vitality of community residents at heart and had established channels of communications (meaning they could help spread the word, inexpensively): 1) the Town of Normal Parks and Recreation Athletics Department, 2) the City of Bloomington Parks and Recreation Department and 3) Illinois State University Athletics Department.

Museum staff and representatives from partnering organizations met on a regular basis beginning in April to plan activities, sponsors, media and other logistical items for the September event. There was a natural fit among this new team; each brought its strengths and creative ideas and all were dedicated to providing a fabulous day for the community. A foreseeable challenge-ensuring that we all communicated the same information to our constituents-was met by the museum acting as the clearinghouse for information. Museum staff created the flyer that each organization used and covered printing and distribution. All promotional materials were branded specifically for the WWDOP using the same artwork, logos and information. In this way, a consistent brand was achieved and all partners felt equally informed and represented to the public.

The Outcomes

The goals articulated for the WWDOP primarily encouraged children and families to unplug from all the distractions that keep them indoors and inactive. But the WWDOP was in fact, just one day. In an effort to affect more permanent change, event planners created a *Healthy Living Logbook* that was given to each attendee. The logbook included:

• information about the Alliance for a Healthier Generation Go Healthy Challenge;

• the Go Healthy Challenge Quiz;

• an activity and nutrition section that tracked fruit/veggie and water consumption as well as activities and their duration;

• 101 Ways to Play in Bloomington-Normal: a list of fun ways to play in the community gathered from the public through a radio promotion and from the museum's Web site.

The WWDOP was evaluated by an Illinois State University research methods class. Students who were onsite at the museum during the event passed out surveys to attendees as they were preparing to leave. Survey questions, along with some answers we received (in parentheses), included:

• How many sites did you visit? (Number varied widely.)

• How many activities did you participate in while at the Children's Discovery Museum? (Many attended three or more.)

• Did you feel the activities were well presented and age-appropriate? (Majority said yes; some said strongly no.)

• Did you partake of the healthy snacks (Mixed results: some never found the snacks!)

• Did you feel the goodie bag and *Healthy Living Logbook* were helpful? (Yes.)

The WWDOP is one of several health-related events and activi-



All promotional materials were branded specifically for the WWDOP using the same artwork, logos and information. In this way, a consistent brand was achieved and all partners felt equally informed and represented to the public. ties now offered by the museum throughout the year. Based on feedback from participants and partners, the museum will continue to fine tune it, but WWDOP will remain an annual event.

REPLICATION TIPS

The WWDOP is still a national event sponsored by Nickelodeon; however, the partnership between the Alliance for a Healthier Generation and Nickelodeon has ended. The Alliance continues to promote the Go Healthy Challenge, and Nick continues celebrating the WWDOP. Drawing on the strength of these nationally recognized programs goes a long way in raising the awareness of the local WWDOP.

The WWDOP is an ideal program for any size museum or community, and it can be scaled to just the right size for your museum and market. Make it smaller by having one or two site locations. Make it larger by offering more site locations, expanding beyond a one-day event or making it into a weekend festival.

IDENTIFY SITES

How many site locations would you like to have offer simultaneous activities? Including the museum, we had four primary site locations the first year and three the year after.

PLAN ACTIVITIES AND RECRUIT PERSONNEL

Determine if staff, outside professionals, or both, will lead the physical activities. Utilize college or university students to help plan and implement activities. This is great experience for the students and lessens the need for paid staff to do everything. Museum staff went to local recreation "experts" at the ISU Kinesiology Department and secured a class of college seniors to program activities. These students conceived, planned and implemented mini-workshops for children and families who visited the museum during the event, including Kid's Yoga, Simon Says the Active Way, Tumbling and Dancing, Warrior Obstacle Course and Relay Races.

In addition to these activities, the museum hosted interactive demonstrations with ISU's Gamma Phi Circus, the oldest collegiate circus in the country, that taught kids how to juggle. A sports conditioning demonstration led by a trainer from the Parisi Speed School took place, and another ISU student group, PE Teacher Educators, led simple games and activities that could easily be replicated later at home with little or no equipment.

In addition to the museum-provided activities, partner sites and activities included the following:

• The Town of Normal Parks and Recreation Athletics Department offered activities at a local park including kickball, volleyball, croquet, tennis, bocce ball and disc golf. Additionally, a sports rehab business provided relay activities and a local rock climbing gym provided its portable rock climbing wall for free climbs.

• The City of Bloomington Parks and Recreation Department offered activities at another park: numerous fitness activity stations along a lengthy circular walking trail, plus other sports skills activities and fun games.

• Illinois State University Athletics Department provided the fourth location, the Reggie Fun Zone, in the tailgate area of a home football game. They set up inflatables for jumping, stationed student athletes for a meet-and-greet, presented the school mascot Reggie Redbird and helped everyone get moving with other games and activities.

DESIGN THE MENU

Each site independently decided on which snacks, if any, to offer. The museum provided several healthy snack options, including fruit, goldfish crackers, Cheerios snack mix and other goodies free of charge. We also obtained 1 percent and skim milk donations from a local dairy to provide to our visitors.

PROVIDE TAKEAWAYS

Each child participant received a goodie bag that included the *Healthy Living Logbook*, a WWDOP water bottle, American Heart Association Frisbees or beach balls, plus other goodies and coupons provided by local businesses. With the exception of the water bottle and the logbook, the rest were donated.

FIND SPONSORS

WWDOP offers great program content ideas as well as brand recognition, but it does not come with any funding. In our case, the American Heart Association was also unable to provide funding although its representatives were a great source of information about potential sponsors. So, in addition to the contributions of the three partnering organizations, sponsorships were critical to cover adver-86 tising and printing expenses, water bottles for the event and to help cover the costs of free museum admission during the event. Museum staff secured three cash sponsorships, totaling \$2,500. This was not enough to cover the event's expenses, and so some costs were absorbed by the museum's advertising budget. In the future, a key goal of the event is to better cover costs by either obtaining more sponsors or trimming the advertising budget.

CREATE THE BUZZ

Work closely with appropriate media well in advance of the event. Utilize as much free promotion as possible. Because there were few funds available for advertising and promotion, we developed creative sponsorships with local media outlets.

The museum successfully partnered with Regent Radio, a local radio group comprised of three stations: a top-40 station, a newstalk format station and a very popular country station—all of whom joined as sponsors. They provided numerous recorded public service announcements, live liners, on-air interviews and a live remote at the museum during the event. In exchange, they received sponsor recognition in all promotional materials, on the water bottle and in the goodie bag.

The event staff also worked with the local newspaper, *The Pantagraph*, months in advance. The WWDOP received a lot of free advertising through the paper's Community Bulletin ads (free advertising space run on Mondays and Tuesdays), plus pre-event and day-of editorial coverage and photographs.

The event committee put together a comprehensive list of promotional avenues, seeking as many free opportunities as possible.

• A full-page, back-cover ad in the Normal Parks and Recreation Fall Program Guide (no charge)

• A program listing in the Bloomington Parks and Recreation Fall Program Guide (no charge)

• Museum newsletter (distribution 16,000; already a budgeted museum expense, no additional charge)

• Flyers in 10,000 elementary school students' backpacks (paid)

• E-Blasts to museum e-list (no charge)

• Promos on museum/sponsoring partners' Web sites (no charge)

• Appearance on a public access television program (no charge)

• Calendar space on the local McDonald's trayliner (no charge)

- Online local calendars (no charge)
- Paid advertisements in four local magazines (paid)
- Paid and free advertisements in The Pantagraph
- Radio promotion on three radio stations (no charge)

• Press releases to more than fifty-five media outlets in a seventy-five-mile radius (no charge)

ENGAGE SCHOOLS

Because this event took place in September when kids are back in school, a free avenue of promotion was discovered among local school districts' physical education (PE) teachers. In the event's first year, staff selected one school on which to focus efforts. The school's PE teachers rallied around the event and tailored their curriculum the week before to lead up to the WWDOP. The local newspaper wrote an article about their efforts, which helped promote the event even more. The following year, staff attended a district-wide PE teacher meeting to present the WWDOP and to ask for their assistance in promoting the event and helping to inspire the love of play in their students.

Lighten Up!

HealthWorks! Kids' Museum South Bend, Indiana

Rebecca Zakowski, Infection Agent

n 2002, in response to a call for childhood obesity intervention, the staff of HealthWorks! Kids' Museum dreamed up Lighten Up!, a ten-week program with the over arching goal of completing a 5K event. Throughout the program additional objectives are addressed, including teaching and reinforcing principles of good nutrition, exposing participants to new forms of exercise and changing common paradigms about exercise (that exercise is difficult, requires a lot of expense and effort and is only for athletes). Lighten Up! stresses the fact that exercise can and should be a lot of fun for everyone, even kids who don't consider themselves athletic.

Though HealthWorks! was new to childhood obesity programming, the museum had several assets to help it get started. For one, HealthWorks! is a children's museum entirely devoted to health education. Revolving around the central message of the power of making positive choices, all exhibits and programs throughout the 12,000-square-foot facility are health-themed. HealthWorks! is affiliated with Memorial Health System and therefore has ample access to health information, resources and professionals. Finally, HealthWorks! had many staff who were motivated to develop something new for overweight kids because of their personal experiences as overweight kids and/or being parents of overweight kids.

Program Development

Though these factors might look like the perfect combination, they didn't necessarily align the way one might expect. HealthWorks! staff spent time figuring out what type of program would fit with its brand. They researched, observed and discussed other childhood obesity intervention programs, many of which felt philosophically at odds with HealthWorks! "keep it positive" philosophy. Staff did not want to focus on a child's weight or food content details such as calories and fat grams. Instead, they wanted to find a way to give kids an "ah-ha" moment that would lead to the internal changes necessary for beginning a lifetime of healthier choices. When they finally hit on the idea, it was a genuine "ah-ha" moment for the staff. According to Laura Garvey, HealthWorks! program director, "Lighten Up! was inspired by one of our own staff member's participation in an annual 5K. She had such a great experience, she wanted to somehow make it possible for kids to do the same."

Once the idea was sold to other staff members, the program began to take shape. First on the to-do list was creating a team to develop and implement the program. HealthWorks! staff were confident they could develop most of the educational content and keep things fun, but they also were aware of their limitations. Staff had a wide variety of backgrounds and qualifications (most of which had little or nothing to do with health) but they did not have anyone with athletic training expertise. Fortunately, the museum's neighbors did: Memorial Health System's Health and Lifestyle Center (HLC), a full-service health club, was located one floor above HealthWorks! in the same facility. Though used to working with adults, two staff members were happy to join the Lighten Up! team. Together, the two



Two Lighten Up! team members, boosted by their supporters, smile after completing their first 5K race.

entities developed the program's training schedule and at least one HLC staff person was present during each of the ten-week sessions.

During program development, Lighten Up! became more than just the program's name—it was the developers' mantra. Garvey said, "We really wanted this program to be fun. We felt it was so important that the kids who were participating were here because they *wanted* to be here, not because their parents wanted them here. We wanted them to look forward to Wednesdays (the day the program met)." To achieve that atmosphere, the team structured each week pretty loosely. More importantly, the team was committed to having a loose, "it's all good" attitude toward participants.

In early planning meetings, the team put together the bones of the program. Each week, participants would meet at the museum from 4:30–6:30 p.m. Roughly half of that time would be spent physically training, and the other half on a health-related topic discussion led either by a staff person or a guest speaker. Participants were also given a home training schedule, which they were to follow on the honor system. The program began ten weeks before the annual Sunburst Races, sponsored the first weekend in June by Memorial Health System and known for its big 5K event open to all ages and abilities.

Marketing the program led to a key decision. It was tough to make a weight loss program sound appealing to tweens and teens. So the team decided to give the program a new spin. Rather than market the program to overweight kids, they marketed it to "couch potatoes," which was found to be a less negative/sensitive term and therefore more appealing to a much wider audience. Overweight kids still signed up, but it appeared

Staff did not want to focus on a child's weight or food content details such as calories and fat grams. Instead, they wanted to find a way to give kids an "ah-ha" moment that would lead to the internal changes necessary for beginning a lifetime of healthier choices. to be much less threatening to classify oneself as a couch potato than overweight or obese. In addition, many kids who had a healthy weight despite a sedentary lifestyle joined the program.

The decision to market to any kid who could stand to increase the amount of activity in his or her life affected how the program was run. Lighten Up! officially became an increased fitness program rather than a weight loss program. "The emphasis on increasing activity was the right fit for HealthWorks!—focus on the positive and on what kids should do to lead healthy lives rather than emphasizing all the things they should *not* do. It is a subtle difference but an important one," Garvey said.

Weight is a very sensitive issue among people of all ages. During the first year, staff weighed kids as part of their sports physicals at the beginning of the program. The kids were told if they wanted to check their weight more often, they could, and that staff would be happy to weigh them on Wednesdays, but it was up to them. The relief felt by some of the overweight kids was palpable.

The level of parent participation required another important decision. Garvey said, "From the start, we saw potential for a family program. But we really wanted the kids to own this program." Year one, the team decided to start with just kids. Even so, during registration, many parents asked if they could participate, too. The team bounced around ideas about how and when to involve parents, and finally decided to just let the parents decide their own level of involvement. There would be no fee for parents and no paperwork or materials provided to them, but they were welcome to stay with their child during the program and participate alongside. If they wanted to be in the 5K, they had to sign themselves up. "Letting the parents decide their participation for themselves was one of the best decisions we could have made. Every year we have done the program,

decisions we could have made. Even about half of the parents commit and join their child each week. It is not unusual to see parents and kids bond through doing the program together, yet at the same time, it doesn't seem like kids whose parents are not here feel bad about that, either. And the parents who join are great chaperones," Garvey added.

But the team was stumped by the training facility. Health-Works! is located in downtown South Bend, an urban setting with no real place for training. Though there are many facilities in the community that could have served as training sites, most were in use during the peak spring season for track and field events. Transportation to these tracks was another issue. At HLC, an adult facility, 4:30-6:30 p.m. was a peak workout time. Ultimately, the HLC staff members on the Lighten Up! team obtained permission for the program to use their indoor facility when weather did not



Kids stretch their muscles as they warm up for their weekly run.

Rather than market the program to overweight kids, it was marketed to "couch potatoes," a term found to be less negative/sensitive and therefore more appealing to a much wider audience.
Overweight kids still signed up, but it appeared to be less threatening to classify oneself as a couch potato than as overweight or obese.
In addition, many kids who had a healthy weight despite a sedentary lifestyle joined the program.

allow the kids to go outside. On nice days, they would run parts of the actual 5K course (the race began near the museum).

The Pilot Year

After two months of planning and publicity, twenty kids between the ages of eight and fifteen signed up—an ideal number for the piloting year. During week one, each participant was given a sports physical (all passed), and began the exercise routine. The loose structure had many advantages besides just setting a comfortable tone. Kids self-selected how fast they wanted to run. Three groups evolved: runners, joggers and walkers. They made friends with one another pretty quickly, and attendance was excellent.

But there were some glitches to iron out. In the first year the kids used the Health and Lifestyle Center's indoor track frequently because of poor weather. This was not always popular with the club's clientele. A program staff member recalled, "We were allowed to be there, but we could tell that a lot of people were not happy with the kids there. I really didn't blame them. They were there for their workout and we were in their way. The kids could sense those vibes, and rather than shaping up, they tended to get a little defensive, and a little rowdier... it wasn't a very good situation." A bigger problem resulting from the indoor confinement was that participants were not as well prepared for the event as they should have been. Eight weeks into the program, kids were finally able to go outside and really train for the first time. They couldn't believe how difficult it was, and how different it was to be outside rather than inside.

A huge plus of the program was that kids who were overweight *were* losing weight. Pants were getting too big. Kids were changing bad habits: they no longer drank soda pop, they took the stairs instead

of the elevator and they saved dessert for a once-in-a-while treat...and it all showed. But a problem with not emphasizing weight loss was that staff could not actually measure how successful Lighten Up! was in this way. There are no metrics to prove what staff and participants knew anecdotally. Nevertheless, staff still concur that they struck the right chord in the program's focus and do not think they would have achieved the same positive results had they chosen to emphasize weight loss.

Finally, after ten weeks of showing up, making friends and exercising, the 5K day arrived. The kids, nervous and excited, looked fantastic in their bright tie-dye shirts and were easy to spot in the immense crowd of race participants. "The shirts were key," Garvey said, "We showed up as a team and that really helped everyone's confidence level. It also made our

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participants easy to spot if they had problems and fell back."

All twenty kids along with several of their parents completed the 5K. In an event with more than 2,500 participants, there were many racers who finished well after the final Lighten Up! team members. The HealthWorks! "couch potatoes" had no reason to be self-conscious and every reason to be proud—each had accomplished his/her goals. HealthWorks! staff were proud, too.

Post-Pilot Improvements

What began as a tenuous pilot program became an annual and favorite HealthWorks! program. Lighten Up! has been offered every spring since 2002.

Over the years, several changes have been made, including the following:

• Eliminating the sports physical. This proved to be a burden, and the museum's risk management department determined it wasn't necessary. A medical release signed by parents is adequate.

• Shortening the program from two hours to ninety minutes. In the afterschool time slot, children didn't have the patience for more than a thirty-minute program in addition to an hour of exercise, and thirty minutes was enough to cover each week's topic.

• Increasing the amount of interactivity and fun in the education portion of the program.

• Inviting groups such as Boys and Girls Club (BAGC) to send members to participate together. BAGC provides transportation and sends staff members to participate with the kids, aiding their motivation. BAGC also helps recruit kids who are difficult to reach.

• Creating a better training plan for inclement weather. Since relying on an adult health club on bad weather days didn't work and no other athletic facilities existed nearby, we redefined "inclement weather." Participants now dress for the weather and go outside to run in almost any condition—which can be a little bit of everything in the northwestern Indiana spring—as long as it does not pose a safety concern. When training must happen inside, it happens in the museum where groups participate in obstacle courses, run up and down the enclosed fire escape stairs and do circuit training in the classrooms. They *love* it!

Each year, the curriculum evolves. As Garvey describes it, "We continue to make it more active and fun—less listening and more doing." Parts of this evolution include:

• Not being just told about healthy snacks. Instead participants make them and eat them on the spot. Tasting is everything!

• Developing extra fun days like Field Day or Downtown Scavenger Hunt Day that engage downtown business owners.

• Guest speakers kids can relate to, e.g. a triathlete who didn't begin to train until he was in his 40s.

• Introducing new forms of exercise such as yoga, kick-boxing and tae-bo.

• Tie-dye day. The last day of class is devoted to tie-dying shirts to be worn on race day. This makes teammates easy to find—the Lighten Up! group stands out, even in a field of more than 2,500 runners. Tie-dying itself is a lot of fun.

• Creating an outside "track" by measuring city blocks and then using it for training. The group makes a great impression as they are seen exercising in the middle of the city. This has proven to be excellent PR both for HealthWorks! and for fitness in general.

• Timing each participant in a mile at program's beginning and end, so each can see their own progress.

One of the program's success indicators has been repeat attendees. One teen girl has participated every year. In addition, many kids who sign up are siblings, relatives or friends of former participants. Wordof-mouth has been Lighten Up!'s best recruitment tool by far.

- Keys to the program's success?
- Not emphasizing weight loss.

• It's non-competitive. Kids are encouraged to focus on doing their personal best, not to compete with one another. Success is completion of the race.

- Being *very* encouraging every step of the way.
- Allowing people to walk the 5K if they want to.
- Allowing parents to participate for free.
- Guest speakers who understand the program's principles.
- Ten-week program length with a definite beginning and end.

REPLICATION

PARTNERS Seek partners who balance out the expertise. The team must have someone knowledgeable and ready to advise about running and safety.

REGISTRATION Paperwork should include parental consent forms, liability releases and photo consents.

TRAINING Use a race training schedule (can be found on the Internet).

A NEARBY RACE! Time your program to end with an accessible 5K event.

FEES/FUNDING Plan a budget that allows for the purchase of foods, t-shirts, etc. HealthWorks! charges \$75 per participant for the ten-week program. Fee includes race registration.

PROGRAM VARIETY In addition to race training, plan for ten weeks of diverse programs related to exercise, nutrition, team-building and goal-setting. Lessons should be short and to the point.

TRAINING FACILITIES Make use of some type of facility where indoor training can take place, no matter how innovatively.

MARKETING PLAN This does not need to be expensive or extensive. You just need to reach kids who may have an interest in the program.

SPONSORS Find a sponsor or solicit other funds to create scholarships for children who cannot afford the program fee. Junior League of South Bend has provided this for several years.

Unexpected Outcomes

Lighten Up! has provided some positive consequences for Health-Works! It has helped to shape the development of new school field trip programs, such as the Kohl's Fitness Blitz programs sponsored by Kohl's Department Stores. HealthWorks! is experimenting with new formats. Lighten Up! recently piloted a version of the program with a church whose participants are mainly adults; Junior League volunteers are planning to take a version of the program on site to Boys and Girls Clubs. In addition, the staff of HealthWorks! and the Health and Lifestyle Center are developing a long-term program that embodies the same principles but continues past the 5K. Finally, the program has impacted HealthWorks! staff members. Each year, new and different staff members become involved with the program and complete a 5K for the first time, enhancing their own personal health. Just as with the kids they serve, the completion of this goal is exciting and rewarding for the staff—a great fringe benefit!

t all started with a significant operational challenge: an empty exhibit gallery in an open museum. How do you attract visitors and engage children in a museum without exhibits? Kidzu Children's Museum (KCM) created Good to Grow at Kidzu to fill a gap in its traveling exhibits schedule. This week-long celebration of children's health and fitness took advantage of Kidzu's temporarily empty gallery space and allowed the museum to pilot a series of programs promoting physical fitness for young children.

Good to Grow at Kidzu was designed to inspire a love of physical activity in young

children and their families. The event featured a series of physically active programs, all of which were provided free of charge to visitors. Offerings included yoga classes for children and families, stretching and story time with local university athletes, stroller exercise classes for babies and parents and dancing to live music by local performers. Well-attended and positively received by the museum's visitors, Good to Grow at Kidzu ultimately became one of the museum's most successful events and served as an inspiration for future health-related educational initiatives.

Kidzu Children's Museum's experience demonstrates how a small museum with limited resources can sow the seeds of good health among its community's children and families.

The Museum and Its Environment

Kidzu Children's Museum, a hands-on museum for young

Good to Grow at Kidzu grew out of a series of brainstorming conversations among staff regarding options for the temporarily empty gallery space created by a week-long scheduling gap between an outgoing and an incoming exhibit. As a new museum working hard to establish itself in the community, Kidzu's staff was concerned about the impact of a closure on their visitors. But how do you attract visitors to an empty museum? children and their caregivers that opened in March 2006, is dedicated to inspiring young children (zero to eight years) and the adults in their lives to learn through play. The museum is located in a 2,700square-foot storefront in historic downtown Chapel Hill, just across the street from the University of North Carolina (UNC).

The museum serves the children and families of Orange, Durham and Chatham counties as well as visitors to the Chapel Hill area. Children and families from all economic



A young visitor to Good to Grow at Kidzu giggles through stretching exercises.

Good to Grow at Kidzu

Kidzu Children's Museum Chapel Hill, North Carolina Cathy Maris, Executive Director backgrounds are welcomed to the museum through sponsored field trip programs, free days and other discounted and free admission programs. The bulk of the museum's visitors, however, are toddlers and preschoolers, with significantly more families than school groups.

Kidzu's educational philosophy is based on the premise that early learning experiences are critical to later life success and that young children learn best through doing, and particularly through playing. The museum's practices are rooted in the National Association for the Education of Young Children's principles of

developmentally appropriate practice. Kidzu subscribes to a "whole child" approach, and is committed to supporting children's cognitive, emotional, social and physical development.

Kidzu currently has one 1,300-square-foot gallery. During its first three years of operation, the museum presented a series of traveling exhibits rented from other children's museums. Although Good to Grow at Kidzu took place during a gap between traveling exhibits, the museum has since introduced its first original exhibit, partially informed by its experience with Good to Grow at Kidzu.

Kidzu's daily family programs and weekly field trips for schools, preschools and childcare centers include story time in English and Spanish, music programs, art and crafts programs and special events showcasing local artists, authors, musicians and other community members. KCM has a small programming room in the rear of the museum that accommodates no more than fifteen children. Museum programs take place either in this space or on the exhibit floor. Prior to Good to Grow at Kidzu, the museum occasionally offered programs promoting physical activity, such as dance, music and movement workshops. Children participating in these programs typically had limited room to move, however, due to space constraints.

Community collaborations providing additional expertise and support play an important role at Kidzu. The museum has numerous partnerships with local educational and cultural groups, including the University of North Carolina and other organizations dedicated to enhancing the well-being of children and families. Established partnerships was a very important factor in Kidzu's ability to develop its Good to Grow at Kidzu event. Kidzu is currently planning an expansion to a larger permanent home. Through partnerships with regional educational and cultural institutions, Kidzu aspires to pioneer innovative approaches to educating children and families in museums. In its current site, Kidzu is piloting educational approaches such as Good to Grow at Kidzu to serve as seeds for future initiatives in the permanent museum.

The Need, The Inspiration

Good to Grow at Kidzu grew out of a series of brainstorming conversations among staff regarding options for the temporarily empty gallery space created by the week-long scheduling gap. As a

new museum working hard to establish itself in the community, Kidzu's staff was concerned about the impact of a closure on their visitors. How do you attract visitors to an empty museum?

What could be done in an empty gallery that couldn't normally be done at the museum? Team members wanted to provide more physically active programs for children. They also wanted to feature several community program presenters whom the museum had not previously been able to accommodate due to lack of space. For instance, a local yoga teacher had volunteered to lead family workshops.

Kidzu's staff was also concerned about the national and local trends in childhood obesity. According to the Center for Disease Control, approximately 15 percent of U.S. children are overweight and another 15 percent are considered at risk for overweight. Obesity rates among preschoolers have nearly tripled over the past twenty-five years and have more than doubled for school-age children.

Orange County, where Kidzu is located, has one of the highest rates of overweight children in the state at 18 percent. Among Orange County children two to four years old, the rate is 17 percent. However, it climbs to an alarming 30 percent for Orange County children aged five to eleven. Children from lowincome families are particularly at risk for obesity. This issue is a significant problem in Orange County, which ranks 68 of 100 North Carolina counties in its rate of low income overweight children.

Kidzu staff were inspired by their

recent participation in the Association of Children's Museums' annual conference, InterActivity, where the association's Good to Grow![®] initiative was featured. Locally, a Healthy Kids Campaign, sponsored by the Orange County Partnership for Young Children, was building awareness of the need for childhood obesity prevention and intervention in Orange County. This constellation of needs and resources led the team to organize a week-long event promoting physical activity for young children. Studies indicate that many young children do not get the recommended amount of daily physical activity (about two hours/day for a preschooler). It is estimated that at least one in three children in North Carolina exercises less than recommended on a daily basis.

Good to Grow at Kidzu targeted families. Research has consistently shown that families who support their children's early development have children who are more likely to be successful in school and enjoy other positive outcomes. As psychologist Urie Bronfenbrenner stated in *Family Involvement in Early Childhood Education* (Spring 2006), "Family involvement seems to be the most effective and economical system for fostering and sustaining child development."





Kids are happy to fill the big empty space of Kidzu Children's Museum's exhibit floor (top), doing yoga stretches on the floor.

Studies indicate that many young children do not get the recommended amount of daily physical activity (about two hours/day for a preschooler). It is estimated that at least one in three children in North Carolina exercise less than recommended on a daily basis. Health researchers suggest that parent involvement is a critical factor in obesity prevention. Harvard researcher Ana Lindsay and colleagues found that "interventions should involve and work directly with parents from the very earliest stages of child development and growth...to reinforce and support healthful eating and regular physical activity."

Program Overview

Good to Grow at Kidzu featured a series of family programs led by community volunteers: fitness instructors, athletes, musicians and performers. Kidzu staff cast a wide net in identifying program presenters. They began by contacting presenters who had previously volunteered at the museum or who had expressed interest in leading a program. Staff also sought other presenters who might be a good fit for this event. The initial goal was to schedule at least three programs during the week. The final Good to Grow at Kidzu event included ten family programs, each thirty to sixty minutes long. Admission to all programs was free to ensure that families from all economic levels were able to attend. Visitors were asked to make a small donation as their means allowed.

To encourage families to extend their healthy habits beyond the museum event, Kidzu provided literature in English and Spanish about supporting children's fitness and health. Resource materials included information on family fitness activities, nutrition for children and reducing screen time. Children also re-

ceived goodie bags with items such as jump ropes and toothbrushes. These materials were donated by Kidzu's community partners.

Participating community partners included: The Orange County Partnership for Young Children, the Orange County Health Department, the Town of Chapel Hill Parks and Recreation Department, the UNC Department of Athletics, the Chapel Hill Fire Department, a local yoga teacher, Chapel Hill's national champion jump roping team "The Bouncing Bulldogs," a Music Together instructor, Healthy Moms of Durham, a UNC student theater group and three local children's bands. Approximately half of these partners had prior involvement with Kidzu. The remainder were new collaborations for the museum.

The event was promoted entirely through free publicity. A local interpreter volunteered to translate materials into Spanish. Volunteers

and partners, including local social service agencies and health clinics, distributed fliers and disseminated information via electronic mailing lists. A local radio station and several newspapers ran free listings.

Program Goals and Outcomes

The following primary goals of Good to Grow at Kidzu were:

• to instill a love of physical activity in young children;

• to show families that committing to fitness and healthy habits is easy and fun; and

• to acquaint families with the many health and fitness resources in their community.

The event was also designed to meet several secondary goals:

• to pilot programs promoting child health and fitness, laying the groundwork for future educational initiatives in this arena;

• to expand Kidzu's network of community partners with a shared interest in promoting child health and fitness; and

• to demonstrate the need for a larger, permanent museum by illustrating the types of programs and events that could be created in a larger space.

Attendance figures and visitor comments indicated that the event was very well received by children and families. The museum was open to the public for a total of ten hours the week of the event, during which time 406 children and caregivers visited the museum. (In comparison, Kidzu typically serves 540 visitors during a regular forty-hour week.) Adult participants voiced appreciation for the playful approach to physical activity and for the high quality of the programs and requested similar programs at Kidzu in the future.

As a result of this event museum staff, now more aware of the need to support families in creating healthy lifestyles for their children, have expanded the initiative in several ways. The museum received funding from the Orange County Partnership for Young Children to implement a new Caregiver Resource Program that provides weekly free visits to the museum along with educational resources and services to support children's healthy development. This project will target families in need and includes collaboration with the local agencies that serve them.

Kidzu also recently unveiled its first original exhibit, *KidZoom: The Power of Creativity!*, that encourages children to exercise creativity in all areas of life. It includes the *Green Thumb Market*, which emphasizes healthy eating and helps children learn about food origins. The exhibit also provides opportunities for children to stretch their bodies as well as their minds and imaginations. Based on lessons learned from Good to Grow at Kidzu, *KidZoom* was designed to allow for slightly more flexible use of floor space for active programs. Staff members have created several new programs to support the exhibit's educational themes, including a Kids in the Kitchen workshop that demonstrates how easy and fun healthy cooking can be.

Lessons Learned

Although Good to Grow at Kidzu was successful in many ways, it was not without its challenges. Coordinating such a large number of community presenters and partners was time-consuming. The level of quality and commitment from partners was generally very high, but there were occasional surprises. In one instance, a scheduled program presenter failed to show for an event, disappointing dozens of children and adults. Staff enlisted the help of parents in leading a sing-along until the next program presenter arrived. Event costs were minimal, due in large part to the volunteer assistance of so many community partners. However, the event could have generated greater revenue if a sponsor had been secured. Kidzu had approached two potential sponsors, but they had already committed their sponsorship funds for the year. Most of the Good to Grow at Kidzu planning took place during the month before the event. In the future, we would plan further ahead, seeking event sponsors near the start of the calendar year and allowing ample time for staff to coordinate with all of the community partners.

REPLICATION TIPS

KEY INGREDIENTS

Space Kidzu's initial problem—an empty exhibit gallery—became one of the event's central resources. Similar events could be replicated in any empty gallery or in other spaces such as a lobby, a cafeteria or an auditorium. If your museum does not have adequate room, see if a community partner can provide a suitable space.

Community Partnerships Perhaps the most important resource for this event was Kidzu's access to a variety of community partners. The museum's very small staff could not have accomplished it alone. Community collaborators provided expertise in children's health and fitness, served as program facilitators, provided caregiver resource materials and helped publicize the event. When planning a similar event, assess the resources in your community. You are likely to find many allies in a quest to improve children's health.

Free Admission Providing free admission was important for several reasons. Underwriting admission costs was critical to ensure that families of all economic backgrounds could attend. Waiving admission fees likely helped attract a larger audience at a time when the museum did not have an exhibit on display. Free admission is useful with pilot programs, as it tends to make an audience more willing to accept any challenges that arise (such as a presenter not showing up) and may make visitors more amenable to sharing feedback. Although this event did not generate revenue for the museum, it was well worth the investment in terms of community response, lessons learned for future initiatives and positive publicity.

Emphasis on Fun "Fun first" is an important aspect of Kidzu's educational approach. The museum strives to make all of its learning initiatives playful and engaging for children and adults alike. Good to Grow at Kidzu was designed to tap into children's natural enthusiasm and to provide opportunities for families to connect with each other in playful ways. To nurture lifelong healthy habits, we must do more than *tell* children and families to be active. We must inspire them to experience the joy of physical activity.

Ultimately, there are as many ways to create a children's health event as there are children's museums. No museum is too small to create a successful children's health event, particularly if you enlist community partners in your efforts. Time-limited events are a great way to pilot programs that will sow the seeds of healthy living in your community's children. Good to Grow at Kidzu began as a onetime event but has since grown into a museum-wide commitment to nurturing children's health. It has the potential to shape Kidzu's educational initiatives for years to come.

ABC Games

Please Touch Mus eum® Philadelphia, Pennsylvania

Lesly Attarian, Vice President, External Affairs

Since 2001, the ABC Games have served as a vehicle for Please Touch Museum[®] (PTM) to promote the importance of healthy living by encouraging children and families to discover the benefits of fitness through play.

In keeping with the museum's mission of enriching the lives of children by creating learning opportunities through play, combined with our play philosophy, activities for the ABC Games capitalize on fun and play to promote physical activity, sportsmanship and selfconfidence—the central themes of this special event.

The ABC Games, a collection of open-ended physical activities, are free with museum admission. The Games are staffed from 10:00 a.m. until 3:00 p.m. (museum hours are 9:00 a.m. to 5:00 p.m.). From year to year, the event has run anywhere from one week to an entire month. It traditionally takes place in June or August, depending on what else is going on around the city. Staff take a break from wearing the standard museum uniform, and if they are facilitating an activity they are encouraged to don a Philadelphia team jersey or tee shirt! The activities draw inspiration from the X Games, the Olympics and classic carnival games. They are designed to produce a festival of physical fun. Activities have included everything from mini-golf to Thor's Hammer to Fitness Dice, Letter Fishing, Hopscotch and Arm Wrestling.

The Museum and Its Health Focus

For more than thirty years, Please Touch Museum has served the Philadelphia region's youngest citizens and their families. The museum's core audience is children ages seven and younger along with their families, teachers and caregivers. Approximately 80 percent of children visiting the museum are under the age of four; school, daycare and camp groups make up an additional 8 percent of visitors.

Since the inception of the ABC Games, PTM staff have seen an increase in the awareness of the problems associated with childhood obesity. In response, the museum has joined a growing national effort to promote healthier lifestyles for children and families. The ABC Games have been a catalyst for PTM to develop more programs focusing on positive, health-related concepts. This event provides the opportunity to deliver the healthy lifestyle message in a fun way to both kids and the adults who care for them—and in a way that does not make parents feel inadequate or somehow guilty that they are not doing enough to keep their kids healthy. The overall tone of the Games' message is not negative or preachy. The ABC Games are a simple, fun way to celebrate play and encourage family togetherness.

Fitness and proper nutrition are essential for busy bodies to play, learn and grow. Promoting healthy lifestyles via the very openended and physical ABC Games contributes to good health of all of our visitors, especially the children. A clinical report published by the American Academy of Pediatrics, *The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bonds*, confirms this belief, arguing that "play is essential to



A young museum visitor tests her strength with Thor's Hammer, a classic carnival game.

the cognitive, physical, social, and emotional well-being of children and youth."

Program Development

The ABC Games bring back the basics of play through simple, uncomplicated activities geared toward the museum's target age group: children seven and younger and their families. Collateral materials, such as activity cards, are distributed at the ABC Games to focus on healthy living, benefiting children, parents and caregivers alike by providing them the opportunity to continue the learning process at home.

The ABC Games were born at Please Touch Museum in 2001 when Philadelphia hosted the X Games. The X Games is an annual international event that focuses on extreme action



The ABC Games bring back the basics of play through simple, uncomplicated activities geared toward the museum's target age group: children seven and younger and their families. sports such as skateboarding, motocross and inline skating in the summer and freestyle skiing and snowboarding in the winter. The X Games are known for featuring music, drawing a hip, young audience and producing well-known super stars such as skateboarder Tony Hawk and snowboarder/skateboarder Shaun White. Compared to more traditional athletic competitions such as the Olympics, the X Games are wild and fun! To piggyback on the hype around these games, PTM staff thought, why not create our own games but at the opposite end of the spectrum and, appropriate to our audience, develop an event that takes play back to basic skills?

You never know where your next great idea will come from. The idea for the ABC Games did not follow a traditional route. The specific concept for the ABC Games was developed by the museum's graphic designer. An avid skateboarder and fan of the X Games, he developed a plan based on his combined knowledge of the X Games and Please Touch Museum's mission and brand. He submitted his

plan to the education department and to the development and marketing departments. He provided not only concepts for the program itself but he also identified marketing opportunities. His proposal included games that were basic, such as hopscotch and mini golf. Even arm wrestling among museum staff was included-and executed! His knowledge of the X Games community helped the museum to find partners to help promote the games. He personally attended some of the X Games at which he distributed ABC Games flyers and gathered athlete and sponsor contact information for the museum. As a result of his visit, Tony Hawk, in his first year as a professional skateboarder, visited the ABC Games with his family.

The details of the program were further developed by the education department. The opening ceremonies for the first ABC Games, complete with the lighting of a torch, took place in August 2001 and ran for five days.



A little girl crawls through a colorful barrel placed temporarily on the museum floor for the duration of the ABC Games.

Many of the games and activities that are part of the ABC Games need little equipment or supplies. Hula hoops, bean bags or simple circle games like Duck, Duck, Goose can be organized, packaged and marketed as an annual museum event. In fact, part of the program's appeal to parents is their familiarity with many of the traditional games they enjoyed playing as kids. Now, as parents, they can have fun again in the museum and pass

their skills on to their own kids.

Program Promotion

The games are well promoted. PTM creates a rack card focusing on the event that is distributed through the local library system and is part of the museum's brochure trade agreement with other area organizations that share its audience. The ABC Games schedule is posted on the Please Touch Museum's Web site home page. Each year PTM looks for various promotional partners and media sponsors to support the program. The event appeals to sponsors. Aligning with the program provides sponsors with the opportunity to be associated ingly some of the museum's more successful partnerships have been with organizations that do not traditionally deal with health issues: banks and most recently an airline.

with the museum and with a fun, positive and healthy lifestyle mes-

sage. Their support of the program grants them increased visibility

cluding major and minor league team mascots, professional strong

men, professional athletes and triathletes. Philadelphia is a big sports

town and partnering with mascots and athletes is a great draw for

visitors. It is also a great opportunity for young visitors to "compete"

In addition to sports personalities, the museum has had success

in partnering with other organizations and businesses who share its

commitment to promoting a healthy and active lifestyle. These partners have included hospitals, groups that promote healthy foods and

Through the years the Games have attracted special guests in-

in the print, Web and broadcast media.

against grownups.

Program Partners

As admission to the ABC Games is free with museum admission, funding support is essential to cover the costs of the program. But it is a very fundable event. The museum has had great success attracting corporations and foundations interested in supporting programs that promote an active lifestyle, especially among children and families. The Games provide an opportunity for sponsors to take part in the opening ceremonies; their employees volunteer to facilitate

other organizations committed to getting kids active and fit, including participants from the Philadelphia Triathlon, Philadelphia sports teams and Kiwi Magazine, a publication for families interested in raising their children the healthiest way possible. In exchange for their support, partners are provided with new audiences to sample their goods and services. Throughout the ABC Games, partners can provide families with information about their business or organization, many of which offer a variety of options for becoming a healthier and more active family. One year, an airline sponsor distributed attractive cards listing Healthy Travel Tips.

Each year, returning partners are given the right of first refusal; after that, the museum's development department pursues new opportunities as needed. The ABC Games have introduced the museum to a new set of organizations and have opened the doors to a number of partnerships and funding opportunities. Surprissome of the games. The museum is dedicated to providing healthy lifestyle programming year-round, so the budget for ABC Games is always included in the museum's annual budget. Even if a sufficient number of funders is not found, the museum still hosts the event. Since its inception, the ABC Games have been fully sponsored 75 percent of the time.

Goals and Outcomes

As with all PTM programs, the goals of the ABC Games are clearly articulated. This is very helpful when approaching a sponsor. The goals of the program are the following:

- to help young children develop a positive relationship with exercise at a young age;
- to provide safe and supervised environments where children can develop social skills like sharing and sports-manship;
- to improve young children's flexibility, coordination and range of movement; and
- to introduce young children to a variety of fitness options.

It is difficult to track the outcomes of the Games because most are optional free-play activities. On many occasions the children and families taking part in the Games are in the museum for only a few hours, and that is the extent of their interaction with the program. However, during the Games, floor staff can observe both adults and children taking part in the activities together. It is our hope that the activities they do in the museum are ones that they will continue to do at home.

Please Touch Museum has adopted an institution-wide healthy lifestyle initiative by promoting healthy lifestyles through exhibits and programs that involve physical activity, play and encourage good nutrition. As part of this institutional effort, the ABC Games are designed to show families that there are very simple and inexpensive ways to be active. One of the barriers to healthy lifestyle success is crossing the bridge between knowledge and practice—what children and families know versus what they actually choose to do. The ABC Games help families playfully take part in fun physical activity and provide them with resources (PTM play cards) to continue these activities at home.

The Games can be fairly staff intensive. But the upside of this is that they provide opportunities for non-public museum staff to get involved in the program and engage with visitors. It moves them out of their offices and onto the museum floor, allowing them to experience in real time what our mission is all about: serving families. Each year, staff gathers together for the opening ceremonies. They celebrate with the visitors and become a part of the event by cheering, chanting and singing along with the ABCs, of course. Involving the full slate of museum staff shows visitors that *all* of the museum staff are dedicated to serving them. And the event is fun for staff, too! There is a new shared camaraderie that develops when you are arm-wrestling your boss. This group involvement sends the message that all PTM staff are responsible for delivering the museum's mission. In addition staff get a chance to work with staff they may not normally work with. It builds a true team environment.

REPLICATION TIPS

The ABC Games are a simple and cost-effective way to celebrate play while encouraging healthy lifestyles. Whether you are a large museum with a large staff and multiple sponsors or a smaller institution with a small amount of space, few sponsors and few staff, the ABC Games are easy to replicate.

START SMALL.

Many of the games and activities that are part of the ABC Games need little equipment or supplies. Hula hoops, bean bags or simple circle games like Duck, Duck, Goose can be organized, packaged and marketed as an annual museum event. In fact, part of the program's appeal to parents is their familiarity with many of the traditional games they enjoyed playing as kids. As parents, they can have fun again in the museum and pass on their skills to their own kids.

The duration of the event can also start small: begin with a oneday event or even a half-day and expand when possible.

Same with sponsors and partners. An initial small first-time event can cost very little to produce, so minimal sponsorship may be needed. But as the event's popularity—and size and complexity—grows, more sponsors and partners can be brought into the fold.

BUILD NEW AUDIENCES—OR ENGAGE NEW MEMBERS OF THE SAME AUDIENCE.

The ABC Games are a great way to engage dads and kids in an activity. Daily at the museum we see moms actively taking part in their children's play experiences. Dads are more often observers. As the ABC Games are an active experience, we have noticed that dads are much more likely to participate in their children's play experiences.

BUILD SLOWLY.

Each year Please Touch Museum adds a new game or activity to the ABC Games experience. Over the years PTM has added hopscotch, mini golf, letter fishing and a mini gym with bar bells, treadmills and stationary bicycles. In 2008 a small gym was designed, complete with a balance beam, climbing rope, mini-treadmills and exercise bikes. Old favorites like Thor's Hammer and Letter Fishing were retained as classic parts of the games. None of these games are permanent installations, so the space needed is minimal.

These same activities and games used in the museum can be portable and later taken on the road to daycare centers, schools or festivals to give people a taste of your museum's mission and brand. It all goes back to the KISS theory: Keep It Simple, Silly!

maha Children's Museum (OCM) has taken the Halloween tradition of trick-or-treating and given it a healthy spin with the help of Whole Foods Market. Although many children in Omaha still follow the house-tohouse trick-or-treat tradition, the museum offers two Healthy Trick-or-Treat Nights on Thursday nights leading up to Halloween. Families are invited to dress in costume and come to the museum to trick-or-treat, but rather than receiving the typical sugary snacks, Whole Foods Market pro-



Substituting healthier treats for candy, Healthy Trick-or-Treat Nights capitalizes on the rest of the traditions of one of the most fun holidays for children.

Healthy Trick-or-Treat Nights

Omaha Children's Museum Omaha, Nebraska

Christina Kahler, Director of Marketing and Public Relations

vides samples of healthy snack options including cereal bars, fruit strips and Chocolate Earth Balls.

Program Development

The Museum and Its Environment

Located in the heart of downtown Omaha, the thirty-two-yearold museum has 45,000 square feet of exhibit space. The Omaha metropolitan area has a population of more than 800,000; the museum serves more than 250,000 guests annually. OCM's permanent exhibits are designed primarily for children zero to eight; however, the museum's programming reaches children as old as fourteen. Following its recent \$6.6 million exhibit renovation, Omaha Children's Museum has become a centerpiece of the Omaha metropolitan area. In addition, popular traveling exhibitions drive attendance of the general public as well as schools and other groups.

The museum's programming centers on science, art and early childhood. Helping families develop healthy habits has become a

It definitely filled a void in the community. Omaha has many trick-or-treating events. All of them follow the traditional candy-filled style of trick-or-treating, leaving the museum's Healthy Trick-or-Treat Nights as a standout in teaching children and families how to make healthy choices, especially around Halloween. focus over the past several years. One museum program, Happy Health with Stuffee, serves as an outreach program to schools and is also presented inside the museum. Stuffee, a giant soft character, unzips down his middle so kids can take out his organs and learn about their functions. Hands-on activities like these help children become familiar with the inner workings of their own bodies while additional presentations, discussions and take-home materials help kids understand the importance of making healthy choices.

Omaha Children's Museum also offers programs and exhibits that encourage physical activity. Rainbow Dance Party is held as a scheduled floor program multiple times each day. Staff Healthy Trick-or-Treat Nights came about in the fall of 2006 after Whole Foods Market opened its Omaha store. The museum was looking to revamp its traditional Halloween program with a healthier twist. In need of a sponsor, museum staff called on Whole Foods. Representatives from the two organizations met to talk about potential collaborations. Previously, the museum held a Halloween event with traditional trick-or-treating, the treats consisting of candy sponsored by a chain grocer. In discussing the possibilities, Omaha Children's Museum and Whole Foods Market saw tremendous opportunity for making any program involving food a setting for teaching children and families about healthy food options. Without any in-house food service, the museum rarely offers food as a part of its programs. (For birthday parties, families bring in their own cakes and other refreshments.) The Halloween event is one exception.

members lead children (and

parents) in singing and danc-

ing together to music. The

museum's newly renovated Charlie Campbell Science

and Technology Center fea-

tures the Super Gravitron,

where balls travel when kids

harness the power of wind, air and water. The museum's

Imagination Playground, a

space for early learners, in-

cludes a two-story farmhouse

and fire-rescue area. Both

provide ample opportunities

for climbing and crawling.

Finally, the Little Market,

a kid-sized grocery store,

encourages healthy food

choices.

With Halloween a few short months away, decision-makers from both Whole Foods and the museum decided that establishing Healthy Trick-or-Treat Nights would be beneficial to both organizations. The Halloween event has always been well attended and very popular. When the new healthier treats concept was initially presented, museum staff were skeptical about dropping Halloween candy from the event, fearing that attendance could decrease. However, everyone concluded that the Healthy Trick-or-Treat Night option would better fulfill the museum's mission of "engaging imaginations and creating excitement about learning."

It definitely filled a void in the community. Omaha has many trick-or-treating events. All of them follow the traditional candy-filled style of trick-or-treating, leaving the museum's Healthy Trick-or-Treat Nights as a standout in teaching children and families how to make healthy choices, especially around Halloween. By re-aligning this holiday event with the museum's mission, the museums adds helping families to think about healthy trick-or-treating options to its already extensive menu of all the healthy benefits of hands-on, interactive play in a safe environment. Compelling external reasons also motivated the change. A few startling statistics drew attention to the need for programs focusing on healthy food choices. Obesity rates have more than doubled among children and tripled among teens since 1980, according to the National Center for Health Statistics. According to the U.S. Census Bureau, in 2005 Americans consumed an average of twenty-six pounds of candy each year. It is believed that a large portion of this amount is eaten around Halloween.

Healthy Trick-or-Treat Nights are offered free with membership or admission to the museum. A large percentage of the attendees are museum members. The museum offers a program called the Welcome Fund, which subsidizes museum membership for families who otherwise cannot afford it. Front desk staffers recognized a good number of the participants in Healthy Trick-or-Treat Nights as Welcome Fund members, showing that these nights are also reaching a number of area low-income families.

During Healthy Trick-or-Treat Nights, Whole Foods Market supplies and sends staff to distribute their all-

natural snacks at five stations throughout the museum. Treats have included cheddar cracker snacks, fruit strips, organic lollipops, cereal bars and all-natural cookies. Whole Foods Market provides warm apple cider for adults as they leave the museum as well as discount coupons and plenty of printed educational materials on healthy eating and food preparation for children and families. Whole Foods also supplies the bags children use to carry their treats.

Program Outcomes

Healthy Trick-or-Treat Nights results have been overwhelmingly positive with more than 1,200 people in attendance each night in the relatively brief 5:30-7:30 p.m. timeframe. Halloween Hoopla, the museum's traditional Halloween party predecessor, had seen about 625 attendees in its last year (2006). Attendance had begun to decline slightly, down from about 850 in its first years. For the new Healthy Trick-or-Treat Nights, we planned for about 500 children to attend. Whole Foods brought enough healthy trick-or-treat items to cover everyone the first night and replenished supplies with items from the store for the second night.

For health-conscious families, the events are a "must attend." For those who have not necessarily thought about healthy trick-or-treating but just want to come dressed up, they are exposed to a number of healthy options for their family. Overall, the comments the museum has received from guests have been extremely positive, and Whole Foods Market continFor health-conscious families, the events are a "must attend." For those who have not necessarily thought about healthy trick-or-treating but just want to come dressed up, they are exposed to a number of healthy options for their family. Overall, the comments the museum has received from guests have been extremely positive and Whole Foods Market continues to be pleased with the partnership. ues to be pleased with the partnership.

Following the success of Healthy Trick-or-Treat Nights, the two organizations have collaborated on additional events including Healthy Back to School and Omaha's Biggest Baby Shower. At Healthy Back-to-School, Whole Foods Market sets up several tables in the museum on a weekend around the beginning of the school year. Their staff distributes healthy snack items and gives families ideas for quick and nutritious lunches. In conjunction with this, the museum educators present Happy Health with Stuffee several times throughout the day.

Many of the top ten power foods (yogurt, leafy greens, eggs, fish, lamb, berries, sweet potatoes, legumes and nuts, according to http://www.wholefoodsmarket.com/nutrition/nutritionpregnant-moms.php) for pregnant and nursing moms were served to expecting and new mothers at Omaha's Biggest Baby Shower. Similar to Healthy Trick-or-Treat Nights, Omaha's Biggest Baby Shower was an existing event that benefited from a healthy spin. Rather than sheet cake from a typical grocer, Whole Foods Market

provided yogurt parfaits with granola and blueberries as well as black bean salsa and guacamole with chips.

In addition to Whole Foods, several additional health-focus conscious partners for Healthy Trick-or-Treat Nights have emerged since the healthy focus was adopted. Omaha Public Library has joined the event to promote its Omaha Kids Read program. Library staff provide stickers for children and opportunities to register for library cards. One library staff member in costume mans a table at the event.

In 2008, the Omaha District Dental Society (ODDS) joined in the event by distributing toothbrushes to all children who attend and oral health education materials to their families. After the emergence of Healthy Trick-or-Treat Nights, ODDS hosted a Toothbrushes through Time exhibit at the museum and has organized several dental health presentations in the museum.

The expected outcomes of this event were to further position the museum as a place looking out for the best interests of children and families and to expose as many children as possible to healthy choices while maintaining a fun, quality event. Despite some early in-house trepidation, the results have far surpassed initial expectations,

> both in attendance and in the museum's positioning within the community, as evidenced in the increased amount of press coverage of the events over those in years past.

> In a survey to museum members, 21 percent of respondents listed these events as one of the programs/benefits most important to them. Considering the number of people these events can



Nights preserve all the fun and magic of Halloween, minus

the candy. Since the event is held on the Thursday night

prior to Halloween, kids can still door-to-door trick-or-

treat as well and get more mileage out of those costumes.

accommodate, this is quite significant.

Healthy Trick-or-Treat Nights affected staff in a number of ways. First, the sheer number of people who showed up for the event, happy about getting healthy foods, was surprising to a few members of the staff who thought that an unconventional, candyless trick-or-treating experience might be undesirable to families. But, many staff members had the opportunity to sample some of the healthy treats themselves and were surprised at their great taste. Most staff members now, at least occasionally, shop at Whole Foods for their own healthy snacks and meals. During a staff retreat, the entire museum staff went to Whole Foods Market and selected lunch items as a way to experience the store, its brand and its healthful items while supporting the company as a partner.

REPLICATION TIPS

FIND A STRONG PARTNER

To replicate this event, a museum needs a strong partnership with a local health/organic food store and/or supermarket to provide healthy treats for the event. This type of event is easy to make a case for with a potential sponsor as it reaches an ideal audience and generates a tremendous amount of media and community exposure.

DETERMINE SPACE CAPACITY

Omaha Children's Museum has a large space to accommodate the equally large number of people who attend this event. It would be difficult for a museum with a smaller space to house such a large number of people. To work within space restrictions, museums could possibly issue timed tickets or have some sort of sign-up process.

PLAN A TREATS DISTRIBUTION SYSTEM

Logistically, treat stations are scattered throughout the museum and identified with balloons and signage. Each child is given a punch card when they check in at the admission desk. Children travel from treat station to treat station (stopping along the way to play in the museum, of course). When they arrive at a treat station, they receive a punch on their card, indicating they have visited the station and received a treat. Since OCM had five treat stations, punch cards list numbers one through five. That way, every child is sure to get a treat from each station and no one item runs out before another.

To get an idea of the initial range and partial quantity supplied by Whole Foods for one year's event, the following is a list of treats per station:

- Station 1: 365 Everyday Value cereal bars
- Station 2: 365 Organic fruit strips
- Station 3: Yummy Earth organic lollipops
- Station 4: Endangered Species chocolate

Station 5: Annie's Bunny Grahams/Ian's cookies/Glee Gum/Surf Sweets candy

There have been a few parents who have complained about the number of treats being too few. We relayed the feedback to Whole Foods representatives. They re-affirmed their commitment to five treat stations, provided they are able to get their suppliers to assist in donations. Like many large retail organizations, Whole Foods is often under national corporate pressure to stretch its marketing budgets in order to make events like this happen. As it is critical to have enough treats for everyone, the museum decided to pursue additional treats for future Healthy Trick-or-Treat Nights. These treats will be from vendors that are non-competitive with Whole Foods. For instance, items may include school supplies, miniature pumpkins or Halloween-themed trinkets.

PROMOTE A UNIQUE HOLIDAY EVENT

The healthy focus of the revamped Trick-or-Treat Nights gives the museum a unique angle to attract media. The resulting earned media coverage is more than ample and gives the event enough attention that paid advertising solely for this two-day event is unnecessary. The museum does include Healthy Trick-or-Treat Nights on posters and print ads for its October exhibit, *Cobweb Castle: The Not-so-Scary Haunted House.*

In advance of the Healthy Trick-or-Treat Nights, both Omaha Children's Museum and Whole Foods Market promote the events through print and online calendars and e-communication. Following the event and several requests from event participants to do so, the museum has distributed the Whole Foods apple cider recipe to museum members via email.

Promotional Talking Points:

• Play up the healthy aspect of what you're doing so people are prepared for the healthy snacks.

• Emphasize this event as part of your museum's role in the healthy lives of children.

• Play up that kids get to trick-or-treat in a warm place and wear their costumes on more than just Halloween. It's nice for parents to think the money they're spending on a costume is not just for one night, plus, kids *love* dressing up!

Benefits for Both Partners

This is a relatively easy program to establish and execute and one that provides the museum with outstanding results. The museum starts with one the most fun holidays for children and exposes families to alternative—and healthy—food options with the help of a trusted community partner. As a result, the museum positions itself—or reaffirms its existing position—as a leader in promoting the well being of children in the community. On the other side of the equation, in partnering with the museum, Whole Foods gets a tremendous amount of exposure in the local media and among more than 6,500 member families of Omaha Children's Museum. This is a great partnership for Whole Foods Market to also showcase its commitment to the Omaha community and its children. The museum has contributed to the success of the program and partnership by paying attention to it and allotting staff time and resources to make it a well thought out and well executed event.

For Omaha Children's Museum, the program has been an unqualified success. Museum members look forward to this event and often come early in anticipation of the yummy snacks and festivities. It also has also been a lucrative program—Healthy Trick-or-Treat Nights is a great way to introduce new guests to the museum.



Boston Children's Museum Karin Hansen (cover); Oscar Williams/Design: Hands On! Inc. (2-4)

Chicago Children's Museum Doris McCann (41); Melissa Wilkes (43)

EdVenture Children's Museum Kerry Johnston

Eureka! The National Children's Museum Eureka! The National Children's Museum

Explorations V Children's Museum Explorations V Children's Museum

Kidspace Children's Museum Kidspace Children's Museum

Long Island Children's Museum Long Island Children's Museum

Miami Children's Museum Danielle Black

Please Touch Museum® Please Touch Museum®

Port Discovery Children's Museum Jennifer Sparks

Children's Museum of Denver Children's Museum of Denver



Front cover Cape Cod Children's Museum, background; foreground, top to bottom: Children's Museum of Denver, Boston Children's Museum and Cape Cod Children's Museum

Back cover EdVenture Children's Museum







eating good foods • getting plenty of exercise • reducing screen time • connecting with the outdoors www.GoodtoGrow.org

