Folio 4: Family Participation

This folio is one in a series of four designed to capture, discuss, and provide evidence of exemplary implementation of the Urban Advantage Middle School Science Initiative as documented by NCREST, (The National Center for Restructuring Education, Schools and Teaching, Teachers College, Columbia University) in a sample of Urban Advantage Demonstration Schools. The focus of this folio is Family Participation.

What is Urban Advantage (UA)?

Started in 2004, the Urban Advantage Middle School Science Exit Project Initiative, (UA), is a science education initiative that partners eight New York City science-rich cultural institutions with the New York City Department of Education and many of its middle schools across the city. In addition to the American Museum of Natural History, which houses Urban Advantage Administration, partners include the Brooklyn Botanic Gardens, New York Botanical Garden, New York Hall of Science, Queens Botanical Garden, Staten Island Zoo, Wildlife Conservation Society-Bronx Zoo, and the Wildlife Conservation Society New York Aquarium. Middle school students, particularly 8th graders, enrolled in NYC public schools, are the focus of this alliance and benefit directly from its efforts.

Funded by the New York City Council and a private donor, Urban Advantage captures, celebrates, and shares the wonder and excitement of scientific discovery by engaging learners in authentic inquiry-driven contexts. The teaching and learning experiences of adults and children participating in Urban Advantage are enriched through high quality teacher professional development, direct access to scientific knowledge through firsthand experiences at UA Partner institutions, classroom resources chosen for their value in promoting scientific inquiry, family participation, and direct support of students throughout the Exit Project process.

Urban Advantage is a fluid mosaic consisting of six components, each essential to maximizing the partnership between the NYC Department of Education and science-rich institutions to benefit the science education of NYC middle school students. These six components include: UA Administration, UA Partners, UA Principals, UA Lead Teachers, UA Teachers, and UA Parent Coordinators. The success of Urban Advantage is achieved through the effective and ongoing communication among these essential supports, each with its primary area of focus, yet all members of a learning community committed to continuous improvement.

Who are Urban Advantage Partners?

[Logos of partner institutions]
What structures and opportunities are in place to maximize family participation in the Urban Advantage Middle School Science Exit Project Initiative?

All components of the Urban Advantage mosaic promote family participation. The Parent Coordinator position, mandated for every NYC school by Mayor Bloomberg, provides support and assistance to families to enhance parent involvement in their child’s education. With support from UA Administration (insert Carol’s position title here), UA Parent Coordinators focus on involving parents in their child’s science education, growing parent awareness and understanding of the UA Exit Project, and increasing family access to and participation and interaction with scientific exploration and discovery, in particular by encouraging family visits to partner institutions. UA Parent Coordinators are integral in the success and implementation of the Urban Advantage initiative through their direct and ongoing contact with parents and their outreach efforts. UA Parent Coordinators organize Family Science Fieldtrips to UA Partner institutions; assist in Student Science Fieldtrips, co-plan Family Science Nights, Science Fairs, and offer Exit Project Workshops. UA Parent Coordinators participate in UA Parent Coordinator Meetings organized and facilitated by Carol Abrahams, Senior Coordinator of UA Communications, American Museum of Natural History, and hosted at each of the UA Partner institutions. The agenda for these meetings includes review and explanation of voucher-use, trip planning and logistics, recommendations for outreach efforts, opportunities for networking with other UA Parent Coordinators and an interactive science experience specific to the hosting UA Partner. These hands-on experiences build science-confidence and provide background information for UA Parent Coordinators to share with parents during Family Science Fieldtrips, and Exit Project Workshops.

“UA Parent Coordinators were immediately engaged by the sheer size and beauty of the reef tank. The instructor invited Parent Coordinators to surface prior experiences when she directed them to interact with the exhibit as they ordinarily would. Parent Coordinators commented enthusiastically, posed a variety of questions, supported their peers and encourage each other to participate. After several minutes of ‘usual viewing,’ Parent Coordinators were directed to focus on one specific type of organism (species) and to observe and record their behaviors. Several minutes later, Parent Coordinators were directed to attend to one organism (individual) as they continued to observe and record their findings. After these three different viewing strategies, the instructor challenged parents to reflect and explain how this process was different from their usual visit to the NY Aquarium.

UA Parent Coordinators explored the Aquarium, engaged in activities and used the same tools and techniques that UA students use for their Exit Projects. As a result of this experience, Parent Coordinators are better able to support middle school student and their parents when they lead trips Family Science Trips to the Aquarium.”

Excerpt from documentation of UA Parent Coordinator Meeting, NY Aquarium, 2007.
**How do UA Parent Coordinators Engage Parents?**

UA Parent Coordinators designed and administered surveys to determine parent interest, availability, and obstacles that might preclude them from participating in School Sponsored UA Family Science Events. UA Parent Coordinators, UA Principals and UA Teachers use survey results to inform scheduling decisions for Family Science Fieldtrips, Family Science Nights, Exit Project Workshops, and Science Fairs.

“Our school has been chosen to participate in the Urban Advantage Middle School Exit Project Initiative. One of the great benefits provided by this program is **FREE Admission** to one of eight science-rich cultural institutions. In order to develop a partnership between parents, students and our school that promotes student success, our science department has developed a Family Science Night to explain how your family can take advantage of this great opportunity. We need your help to determine the best days and times to coordinate our family workshops and trips.

We will be conducting a Family Science Night to do fun science activities together, explain the Exit Project process and to promote our **FREE** family trips that can serve as a resource to both parents and students. Please keep in mind that completion of a Science Exit Project is a mandatory graduation requirement for all 8th grade students. Please complete the survey and return…”

UA Parent Coordinator Parent Survey, Urban Advantage Demonstration School

**Survey questions include:**

1. What are the best days and times for you to attend a workshop?

2. When are the best days and times for you to attend a Family Fieldtrip?

3. Which of our New York City science-rich cultural institutions is your family interested in visiting?

4. What might keep you from attending a workshop/event and/or Family Fieldtrip?

**What are Exemplary School Sponsored UA Family Science Events?**

**Family Science Fieldtrips** may be scheduled at any one of the Urban Advantage Partner institutions by the UA Parent Coordinator. These fieldtrips, usually scheduled on weekends or school holidays, are fully funded by UA through the voucher system. Parent Coordinators use their survey of parents to determine their interest, availability and partner institution preference to inform their fieldtrip planning.

“The UA Parent Coordinator works with the science teachers to plan family trips using Urban Advantage vouchers and funds. Last year we went to the Brooklyn Botanical Garden; quite a few families went. This year, there will be a trip, but were not sure where. The Parent Coordinator is great and gets many parents to come to meetings by effective advertising, and providing a warm, inviting environment. She has invited teachers to PTA meetings to talk to parents about Urban Advantage and set up a workshop for parents who wanted to learn how to help their kids with their Exit Projects. They had a really good turn-out.”

Science Teacher Interview, Urban Advantage Demonstration School
Family Science Night

Family Science Nights are another exemplary school sponsored way to involve parents in the science education of their children. These evenings include a review of the Exit Project requirements coupled with opportunities for children and parents to participate in side-by-side, inquiry-based, hands-on investigations.

“Come spend some time with the fishes or maybe a penguin or two at the New York Aquarium on our Urban Advantage Family Outing on Saturday, May 5, 2007. The bus will be leaving from in front of the school at 9:30 AM and returning to the school at 1:00 PM…if you have any questions please contact the Parent Coordinator…”

Parent Coordinator’s flyer announcing a Family Fieldtrip, Urban Advantage Demonstration School

“On Saturday, December 26th, in keeping up the momentum of science exploration, 50 participants including teachers, parents and students, loaded onto two buses and ventured on a Family Science Trip to the NY Hall of Science in Queens. The Hall is NYC’s hands-on science and technology center featuring over 400 hands-on exhibits where families can explore the wonder and excitement of biology, chemistry and physics and the ‘gross side of science’ watching a real cow eye dissection! Don’t miss our next Family Science Trip coming up in February…”

Parent Newsletter, Urban Advantage Demonstration School

“More than two dozen students and their parents attended the first annual Family Science Night on December 14 from 6-8 PM…The Family Science Night is geared toward helping parents to understand what their children need to do in order to complete their Science Exit Project…The evening included hand-on activities which parents and their children performed together…”

Promotional Materials, Urban Advantage Demonstration School

“You are invited to a fabulous Family Science Event! Every student must bring a parent…Come for the fun of it! Do lots of cool activities and take home the stuff you make!”

School Flyer Announcing Family Science Night, Urban Advantage Demonstration School
In October, all of the Urban Advantage Partners host **Family Science Sunday**. This day is informally structured to invite families to explore an Urban Advantage Partner of their choice. Families receive an additional voucher specific for this day and are invited to participate in hands-on activities.

**Annual Science EXPO**

The Annual 8th Grade Science EXPO is sponsored by Urban Advantage and hosted by the American Museum of Natural History. This culminating event is a celebration of students and their Exit Projects. Student select from one of four different types of Exit Project options which include: Field Research, Controlled Experiment, Design Research and Secondary Research. Driven by their own questions, guided by the GROW rubric and supported by their teachers and all UA components, students share their investigations, experience, and findings publicly. The EXPO invitation provides free admission to the American Museum of Natural History for up to four people for the day.

“During Family Science Sunday, we offered a variety of hands-on activities for families, parents and children to explore. Each station was staffed by an Urban Advantage staff member. One station was devoted to microscopy where parents and children used microscopes to observe insects...at another station we had UV sensitive beads where parents and children made bracelets and learned the science behind why the beads changed colors.”

Carol Abrahams, Senior Coordinator of UA Communications American Museum of Natural History, American Museum of Natural History
How is Family Access to UA Partner Institutions Maximized?

Urban Advantage provides vouchers to students and their families, teachers, parent coordinators, and UA classes. Vouchers can be exchanged for free admission to UA partner institutions. UA also provides one free bus per school for family trip. There are four types of vouchers valid for free admission to UA Partner Institutions.

**Student/Family Vouchers:** Each UA student receives two vouchers. Each voucher is valid for the student and up to three additional visitors. Student/Family vouchers for visits that the student takes with his/her family.

**Family Science Sunday Voucher:** These vouchers are to be used on in October for the Family Science Sunday event.

**Family Field Trip Vouchers:** Each UA Parent Coordinator receives three vouchers for school-organized family visits on weekends or school holidays. Each voucher is valid for up to 40 people.

**EXPO Vouchers:** The EXPO invitation provides free admission to the UA EXPO hosted the American Museum of Natural History for up to four people for the day.

Documentation of the Urban Advantage Initiative

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