NEIGHBORHOOD TREE PROJECT AT PS 45 - 2004

After a successful project with a single class in 2003, the Neighborhood Tree Project at PS 45 in West Brighton, Staten Island expanded in 2004. The new principal Teresa Caccavale, after meeting with third grade teacher, Kim Colbeck whose class piloted the project in 2003 and two parents, Lenny Librizzi of the Council on the Environment of New York City, who was part of the team that created the Neighborhood Tree Project, and Deirdre Armitage who is assisting with curricula resources, decided to expand the project to 6 classes. The Neighborhood Tree Project is included in the PS 45 Comprehensive Educational Plan.

Ms Caccavale and Mr. Librizzi subsequently met with 6 classroom teachers and 3 science teachers to introduce the project and to begin to plan implementation with the teachers. Mr. Librizzi conducted 6 staff development sessions in April and May where the teachers were introduced to OASIS and the work that had been done by adults and students in the previous year.

The group of teachers also covered tree identification, on-line mapping resources, use of the measuring tools, cross curricula connections and lessons and an outdoor practical session. It was determined that at least 4 adults would be necessary to make the experience go smoothly and be rewarding for the students. Much discussion and brainstorming about logistics also took place.

In June, each class spent a morning or afternoon mapping some of a total of 28 trees around the school. The classes and their teachers were 3-207 Ms. Colbeck, 4-312 Ms. O'Donovan, 2-214 Ms. DeRosa, 3-301 Ms. Vuoso, 3-309 Ms. Kern and 4-307 Ms. Manuelle. Science teachers Ms. Guttu and Ms. Hyland assisted. Ms. Hyland prepared an activity sheet for students to complete while waiting their turn to use the tools.

During the outdoor sessions a science teacher and other adults joined Mr. Librizzi and the classroom teachers. For 4 sessions, Mark Semanchik, a parent who also was a volunteer in the pilot Neighborhood Tree Project assisted. Another volunteer, Christine Ellison participated in one session. Meredith Olson from the Council on the Environment and a class parent assisted for one session each.

The students used several measuring tools including a Biltmore stick (to measure tree height and height to canopy), a rolling tape measure for measuring long distances (the surveyor has to be 66 feet away from the tree to measure height) and a diameter tape measure. They also determined foliage density and used the estimating skills that they had learned in their math lessons. For mapping purposes, they determined the exact location of the tree in relation to the school or homes in the neighborhood and placed the tree on a map.

In preparation for the fieldwork students created artwork about trees, were read books about trees or were assigned readings about trees, collected leaves and other tree materials and practiced using measuring tools. Classes created KWL charts determining what they Knew, Wanted to know and Learned about trees. Mr. Librizzi made a brief presentation to each class before their mapping session and when time allowed was able to get feedback and answer students' questions.

In an evaluation meeting with Ms. Caccavale, the teachers expressed an overall positive experience with the project but asked for more training and more planning time. They also wished to start the project in the fall, make it a yearlong project and to coordinate

with the science curricula where possible. The 3rd grade science curriculum includes ecology and the environment. There was a suggestion to try to find some way to do the project with small groups of 5 students at a time. Other ideas included giving names to individual trees, labeling the trees that were surveyed, looking for insects, birds and mammals, exploring the neighborhood further, planting trees, letter writing to politicians, determining activities for all grades K-5 and related field trips.
Other possible enhancements or improvements include using the data to make spreadsheets and to determine averages and species distribution and overall coordination with Math and other curricula, introducing technology to the students and teachers by including the use of handheld computers to collect the data and involving the PTA through tree walks and other activities. Under discussion is partnering with another school to have the experienced teachers from PS 45 help to train teachers at another school. Seasonal visits to each class's trees to see the changes the trees go through over the course of the year was also suggested.
There are many more trees around the school and the surrounding blocks to continue the tree mapping with additional classes.

The initial Neighborhood Tree Project was funded through the Forest Service's Urban and Community Forestry Program (Title VIII) to focus on how neighborhood tree data can be collected by community partners, enhanced through computer mapping and analysis, and returned to the public through the OASIS maps. Street trees were surveyed in summer 2002 by adult Citizen Pruners in selected communities in the Bronx, Manhattan, and Staten Island. Data collected included location, height, canopy size and height to crown, diameter at breast height (DBH), foliage density, tree age, condition, surveyor names and the date. Information was also collected about the tree pit.
Individual tree locations were plotted on maps enabling OASIS web users to click on a tree to find out its species, height, condition, and environmental & health benefits.

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